Chapter 10.0
Project Design Features, Mitigation Monitoring and Reporting Program, and Secondary Impacts

This chapter provides a summary of the Project Design Features and the Mitigation Monitoring and Reporting Program (MMRP), which summarizes mitigation measures and provides information on the timing of verification and the responsible agency. In addition, this chapter provides a summary of the secondary impacts that could occur from the implementation of the mitigation measures. A fourth section provides the potential environmental impacts that could occur if improvements were to be implemented on SR 76 in the vicinity of the hairpin curve and Rice Canyon Road, (see Section 4.5 for a discussion of traffic issues).

10.1 PROJECT DESIGN FEATURES

The following is a summary of the project design features that are incorporated into the project:

4.2 Geology and Soils

- The engineered drainage system for the project includes desilting basins to control soil erosion and siltation.
- Reinforced slabs will be placed over the aqueduct easement so that earth-moving equipment places no weight on the pipelines while crossing the easement.
- A pre-blast survey will be conducted by a qualified geologist to identify areas of potential rockfall concern. Identified isolated rock masses will be removed as necessary if deemed insecure.
- Natural vegetation will be maintained to the maximum extent possible. Diversion structure(s) will be constructed within Basin 1 prior to the start of grading activities where debris flow risk is anticipated.

4.3 Hydrogeology

- A composite liner and leachate collection system will be installed and monitored as required by the RWQCB. The performance of the landfill will be monitored with the subdrain and groundwater monitoring systems. The subdrain system will be constructed to collect and control groundwater that intersects the subgrade surface. The subdrain system will serve to maintain the separation of five feet between the refuse and groundwater required by federal regulations (40 CFR, Subtitle D, Part 258). The subdrain system will be monitored for the

presence of contamination in accordance with the WDR parameters. Monitoring procedures will also be designed consistent with the requirements of the RWQCB.

- The water quality monitoring system will include the installation of monitoring wells at both upgradient (background) and downgradient (point of compliance) locations to the landfill and surface water sampling points both upstream (background) and downstream of the landfill as required by Section 20415 (b) of the Title 27 CCR.
- The project incorporates a combination of engineering controls, (e.g., interim covering of the refuse, suitable slopes for efficient drainage, culverts), and a water quality monitoring program, to ensure that water quality is adequately protected.
- A reverse osmosis (RO) system will be installed in the southwestern portion of the ancillary facilities area. The RO equipment and interconnecting piping will be constructed above ground inside a concrete containment area with a slatted chain link fence around the area. The RO system will be sized to process 50 gpm (although the housing will be sized to allow for a larger system).
- Two 10,000-gallon leachate collection storage tanks will be located in the southwestern portion of the ancillary facilities area. The collection tanks will be monitored for capacity at least once per day.
- Water discharge from the subdrain system will be collected in a 10,000-gallon holding tank in the southwest portion of the ancillary facilities area. Although greater volumes are not anticipated, if needed, additional above ground tanks will be added to collect all of the subdrain system water. Subdrain system drainage water will be reused on-site or may be discharged to the San Luis Rey River only after tests determine the water is not contaminated in accordance with the NPDES permit. Any contaminated water will be treated at the landfill by the on-site reverse osmosis system for on-site use or transported to an appropriate off-site disposal facility.

4.4 Surface Hydrology

- Excavation in the river channel will be implemented upstream and downstream of the new bridge to maintain the 100-year flood elevations at or below existing levels.
- The proposed bridge structure will be founded on deep pile-supported foundations to protect against potential stream scour effects. Standard seat type abutments on pile footing, and five intermediate bents will be used to support the bridge superstructure. Seat type abutments will be protected from local scour by a surrounding blanket of rock slope protection and deeply founded concrete piles.
- To reduce scouring, rip-rap or some other protective material (gabions, armorflex, etc.) will be used at the bridge abutments. It may also be placed at the low flow culvert at the south end of the bridge structure, and in limited areas along the banks of the access road south of the bridge. (The exact location of rip-rap placement will be determined during the final engineering design phase.)
- Sediment and erosion will be controlled with BMPs.
- The landfill working face and stockpile/borrow areas have been designed to direct runoff away from the landfill working face. On-site drainage features are designed to control stormwater that falls on the landfill and surrounding support facilities. The berm around the landfill deck

perimeter would intercept stormwater flows and direct water into the downdrains which would convey the flows to perimeter channels. Water in the perimeter channels will flow into one of two desilting basins and will be tested prior to discharge to the San Luis Rey River.

- Before each rainy season, after each major storm, and monthly during the rainy season, all drainage facilities will be inspected and any required maintenance performed to ensure that the drainage channels and desilting basins function properly.

4.5 Traffic and Circulation

- SR 76 will be improved at the access road as shown on Exhibit 3-6 to provide an eastbound deceleration lane and a westbound left-turn lane and to improve sight distance per Caltrans requirements. The improvements, which are approximately 1,700 linear feet, will realign SR 76 to the south of the existing alignment and will widen the roadway to 52 to 64 feet.

4.6 Noise and Vibration

- The project includes the preparation of a blasting plan which will incorporate the following measures:
  - Blasting operations will be performed in accordance with criteria adopted in San Diego County Water Authority design procedure manual 02229-3 (February 1995). Blasting will not occur within 500 feet of the existing pipelines 1 and 2, unless approved by SDCWA.
  - All drilling and blasting operations shall be conducted by a State-licensed blasting contractor with adequate blasting insurance.
  - Seismograph instrumentation will be placed along the aqueduct alignment in the vicinity of any blasting operations.
  - All drilling and blasting will be performed during hours designated by local, State, or federal ordinances.
  - Monitoring of the blasting operations within close proximity to the SDG&E towers will be performed to verify that peak vibration levels and U.S. Bureau of Mines RI 8507 standards are not exceeded.
  - Blasting operations will not occur within 150 feet of the SDG&E towers.
- Rock crushing or tire shredding will be located a minimum of 1,500 feet from locations 1 through 5 (Exhibit 4.6-4) unless other forms of noise attenuation, such as berms or acoustical curtains, are used to reduce combined landfill noise levels to below 62.5 dBA Leq.
- Written notice to residents within a one-mile radius of the blast site will be provided at least 24 hours in advance of any blasting on-site.
- A 15- to 20-foot high berm will be constructed and maintained along the northern boundary of Borrow/Stockpile Area A from the haul road westward wrapping around the western boundary of Borrow/Stockpile Area A during initial construction and during future operations. The base elevation of the berm would change whenever the elevation of the stockpile increases or decreases; however, the height relative to the stockpile would remain at 15- to 20-feet above the top of the stockpile.
- Five-foot high berms will be constructed along the southern edge of the Borrow/Stockpile Area B and the landfill working face, which face the residential zoned property south of Gregory Canyon Landfill. The berms shall block line of sight from the residential property to

the heavy equipment working the southern portions of Borrow/Stockpile Area B and the landfill working face.

- A 10- to 16-foot high sound wall will be constructed along the northern edge of the facilities area and the truck route east of the facilities area.
- The flare station will be designed and located so that the flare does not generate noise levels that will exceed 49 dBA at a distance of 400 feet from the flare. Measures may include a sound wall at the base of the flare as well as any needed silencers on the equipment.

4.7 Air Quality and Air Toxics Health Risks

The following project design features from Section 4.7 and dust control measures from Section 3.5.8 shall be implemented:

- As needed, the landfill operator will wash off the tires of trucks and construction equipment after traveling on on-site unpaved roads.
- All unpaved haul roads shall be watered every two hours, unless the road surface appears visibly damp.
- The landfill operator will regularly sweep the paved portion of the site access road and water the paved portion of this road at least twice daily.
- The access road to the unloading area will be paved until the last 500 feet of the road, which will be unpaved.
- The unloading area will always be located adjacent to the active face or area where waste is being actively covered.
- Crushed rock will be used on the unpaved haul roads, which results in a two percent silt content on the unpaved roads.
- All on-site haul roads will be watered every two hours, unless the road surface appears to be visibly damp. This results in a 95 percent control efficiency for the haul roads (SDAPCD, 1996.
- Traffic speeds of no more than ten mph will be maintained on all on-site unpaved road surfaces, to prevent excessive PM10 emissions.
- The landfill operator will apply water and/or plant temporary vegetation on intermediate soil cover areas.
- The landfill operator will plant and maintain a vegetative cover on completed fill and excavation slopes.
- The use of tarps on commercial vehicles will be required.
- Water spraying of dusty loads during tipping will be performed.
- Groundcover on areas disturbed by construction will be re-established through seeding and watering those areas that will not be disturbed for extended periods (e.g., two months or more).
- The landfill operator will apply cover soil or approved ADC to the working face of the landfill on a daily basis.
- Alternative daily cover (ADC), such as synthetic tarps and processed green material (PGM) may be used at the project site, as feasible.
- The project design includes the installation of a gas recovery and flaring system and incorporate BACT for NOX control.

- The landfill operator will utilize Best Available Dust Control Technology to reduce diesel particulate emissions from on-site diesel equipment.
- The landfill operator will utilize on-site diesel equipment that meets California certified (post-1996) off-road engine requirements.

4.9 Biological Resources

Construction Features

- Dairy removal will occur as part of the initial construction phase, which will enhance wildlife foraging opportunities, remove a significant cowbird attractant and reduce existing edge effects adjacent to the river.
- Borrow/Stockpile Area A will only be used during the initial construction period and then during landfill closure beginning in approximately year 25 and will be revegetated with native species between use periods and after final landfill closure.
- The haul road to Borrow/Stockpile Area A will only be used during the initial nine-construction period and at final landfill closure beginning in approximately year 25. No improvements to the internal haul road are required; the only grading would occur where turnouts are proposed on the site plan.
- The low-flow crossing will only be used during initial construction (and would be abandoned following completion of the bridge) during daylight hours.
- Access road and bridge construction will occur during daylight hours when wildlife movement by species such as mammals is less frequent.
- The bridge pilings will be drilled in place, rather than driven, to minimize construction noise.
- Riparian habitat adjacent to the proposed bridge structure will only be cleared beneath and within 50 feet of the east side of the structure.
- Diversion structure placement to avoid impacts from debris flow will not occur during the eagle breeding season.

Operational Features

- The dedication of a minimum of 1,313 acres of land for permanent open space will occur prior to operation and the open space will be managed in perpetuity for the protection of sensitive habitat and species.
- Upon final closure, the remaining undedicated portions of the landfill site will be placed in open space in perpetuity.
- Excavation and filling of the landfill will be phased to minimize ground disturbance and will only occur during the operational hours of the landfill.
- Native vegetative cover will be established on disturbed areas, including the borrow/stockpile areas and landfill footprint.
- Landfill perimeter fencing will allow for wildlife movement where topography is the barrier to human access during the life of the landfill. The chain link fencing will be replaced with three to five strand wire fencing at the time of closure of the landfill.
- The block of habitat between the two borrow/stockpile areas will be maintained to provide for riparian to upland movement opportunities for most species.
- The deck of the bridge will be 17.5 feet above the river bed allowing for wildlife movement underneath.

- The bridge support will consist of five sets of two bridge pilings separated by more than 100 feet to allow wildlife movement under the bridge.
- Reflective strips will be used on the inside structure of the bridge. No lighting will be installed on the bridge.
- Slow traffic speeds would be required on the access road and bridge to reduce potential impacts to wildlife (for example, birds potentially being struck as they fly across the bridge).
- The entire access road (including bridge) will be gated and locked to prevent human access during the non-operational hours of the landfill.
- Low impact, focused, and shielded lighting will be installed at the facilities area for security.
- A minimum of a 100-foot riparian buffer will be maintained between the landfill operations and the river habitat, except where the access road/bridge crosses the river.
- Vector control measures, including the use of daily cover, will be implemented to prevent nuisance species attracted to the landfill to cause predation impacts on native species. The methods for controlling or deterring nuisance species will be compatible with native species protection. (The Vector and Bird Control Measures (Plan) will be included in the JTD.)
- No permanent sources of standing or flowing water will be produced on site to prevent increased amphibian predation by non-native ants and bullfrogs.
- The relocated electrical transmission lines will be parallel to the existing topography of Gregory Mountain to avoid indirect impacts on the golden eagle and other raptors.
- Litter control and removal would minimize the introduction of invasive non-native plant species caused by illegal dumping of lawn and garden clippings, trash and other refuse.
- An 18- to 20-foot berm will be constructed and maintained along the northern edge of the landfill footprint between the facilities areas and the landfill footprint.
- Rock crushing/processing and tire shredding will occur within the landfill footprint at least 1,500 feet from the nearest least Bell's vireo and southwestern willow flycatcher habitat.

4.13 Aesthetics

- Retention of the existing knoll north of the facilities area to screen views of the site.

4.15 Public Services and Utilities

The following project design features have been incorporated into the project design to reduce the potential for fire hazards at the project site:

- No burning of refuse will be allowed.
- A firebreak of 150 foot minimum clearance around the perimeters of the landfill footprint will be maintained unless soil cover is placed regularly throughout the day in compliance with California Public Resources Code Section 4373.
- The application of daily and intermediate cover will be performed.
- Load checking for smoldering or burning wastes will be performed. Smoldering wastes will be separated if spotted.
- Covering of any fire with soil will occur.
- Extraction wells will be monitored for temperature and oxygen content.
- Equipment with internal combustion engines will have spark arrestors.
- The removal of flammable debris from the under carriages and engine compartments of heavy equipment will occur on a regular basis.

- Fire extinguishers will be placed at the entrance facilities, in the administration and operations trailers, and in landfill equipment and vehicles.
- Hazardous materials, collected as part of the Hazardous Waste Exclusion Program, will be stored in fire proof containers located in the ancillary facilities area.
- Storage of tires within the landfill footprint will occur in compliance with the County's 1994 Uniform Fire Code, Section 1103.3.6, Outside Storage of Tires, as well as Title 14, Section 1354 of CCR.
- Tire shredding will occur a minimum of every six months.

4.16 Human Health and Safety

- A Hazardous Waste Exclusion Program (HWEP) which will be implemented to discover and discourage attempts to dispose of hazardous or other unacceptable wastes at the landfill; the HWEP shall be in addition to MM 4.15.C5D.
- Tire storage will be within the landfill footprint in compliance with the County's 1994 Uniform Fire Code, Section 1103.3.6, Outside Storage of Tires, as well as Title 14, Section 17354 of CCR.

The following vector control measures[1] will be employed for the proposed project:

- Daily compaction and application of daily cover will occur.
- Materials that attract vectors will be stored in closed containers and/or enclosed structures.
- Repairs of building openings, ground holes and deficiencies in perimeter fencing will be performed to deter intrusion of ground vectors.
- Proper grading/drainage to eliminate puddles and wet areas will be performed.
- The desilting basins will be self draining within 72 hours, and will be regularly cleaned out.
- Tire shredding will occur at a minimum of every six months.
- Other deterrents for vectors will include the playback of distress vocalizations, falcon kites, owl decoys, dispersal by humans and/or dogs.
- The use of conventional slap-traps and anticoagulant rodenticide will be employed.
- The use of professional pest control services will occur.

A litter control program will be implemented to minimize the potential for a litter problem within the project site and will include the following:

- Compaction and application of daily cover will occur.
- Temporary fencing around active disposal area will be provided.
- The use of tarps on commercial vehicles will be required.
- At least five days each week a clean up team, consisting of one truck with a minimum two-person crew, will inspect for and clean up all litter and illegal dumping on or adjacent to the access road and SR 76 between I-15 and the project site. A litter inspection will be performed every day the landfill is open to accept refuse and litter will be cleaned up on the sixth day as determined necessary by the inspectors.

[1] The Vector and Bird Control Measures (Plan) will be contained in the JTD.

10.2 MITIGATION MONITORING AND REPORTING PROGRAM

The San Diego County Department of Environmental Health (DEH), as the Lead Agency and Local Enforcement Agency, will adopt a Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6. The purpose of the MMRP is to ensure that the project complies with all applicable environmental mitigation and permit requirements.

Mitigation measures are presented in three sections. Section 1 (Table 10-1) contains mitigation measures identified to reduce specific project impacts. Section 2 (Table 10-2) contains mitigation measures contained in Proposition C. In both sections the measures are organized and referenced by subject category and include those for: Land Use, Geology and Soils, Hydrogeology, Surface Hydrology, Traffic and Circulation, Noise and Vibration, Air Quality, Biological Resources, Paleontological Resources, Archaeological and Cultural Resources, Ethnohistory and Native American Interests, Aesthetics, and Human Health and Safety. Section 3 (Table 10-3) contains mitigation measures to reduce identified impacts if the First San Diego Aqueduct Relocation Option were to be implemented.

Each measure has a numerical reference. The first two numbers, for example 4.1, refer to the section in the Final EIR. The last number, for example -1, refers to the identified impact that the mitigation measure addresses. The MMRP identifies the mitigation measure as well as the timing of implementation and the responsible party that will ensure that each action is implemented.

Mitigation measures applicable to the Project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, rectifying impacts by repairing, rehabilitating, or restoring the affected environment, and/or reducing or eliminating impacts over time by preservation and maintenance operations during the life of the action.

PRC Section 21081.6 requires the Lead Agency for each project, which is subject to the California Environmental Quality Act (CEQA) to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does occur. DEH is the designated lead agency for the Mitigation Monitoring and Reporting Program. DEH is responsible for review of all monitoring reports, enforcement actions, and document disposition. DEH will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	4.1 LAND USE					
MM 4.1-1	The applicant or operator of the landfill shall establish a Citizen Environmental Review Board as required in Proposition C (Section 5Q). The applicant shall provide written verification to the County Department of Environmental Health after at least five public agencies have executed waste supply agreements with the operator.	Written verification	After at least five public agencies have executed waste supply agreements with the applicant	County Department of Environmental Health		
MM 4.1-2	In compliance with Section 3B of Proposition C, prior to commencement of operation of the landfill, the applicant shall either dedicate 1,313 acres of the site as permanent open space or create a permanent open space easement consisting of not less than 1,313 acres for long-term preservation of sensitive habitat and species, including coastal sage scrub, coast live oak woodlands, and cottonwood-willow riparian forests. The applicant shall convey or dedicate this land or easement in perpetuity to the satisfaction of the County of San Diego. The applicant shall provide a copy of the recorded fee conveyance or open space easement to the County Department of Environmental Health prior to commencement of operation.	Copy of recorded fee conveyance or open space easement	Prior to commencement of operation	County Department of Environmental Health		
MM 4.1-3	Before commencing any construction work related to the landfill, the applicant shall provide the Local Enforcement Agency with a copy of the executed agreement between Gregory Canyon, Ltd. and the San Diego County Water Authority providing for relocation and protection of the San Diego Aqueduct pipelines.	Copy of executed agreement	Prior to commencement of construction	County Department of Environmental Health		
	4.2 GEOLOGY AND SOILS					
MM 4.2-1	Before the liner is buttressed with refuse, the geosynthetic materials (i.e., plastic geomembranes and geotextile fabrics) shall be anchored at the head of the slope, and weighted throughout their extent with 20-pound sand bags on five-foot vertical spacing. If the liner system were to be damaged before it is weighted down by refuse, the applicant shall repair, and if necessary reconstruct, the liner. Repairs to the geosynthetic materials will be completed and tested in accordance with regulations	Field observation	Prior to placement of waste As necessary during construction and operation	Regional Water Quality Control Board		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	and project specifications. The RWQCB may be present to perform field observations at any time during the repair to ensure compliance.					
MM 4.2-2	Following significant seismic events, inspection of all facilities and structures, as well as surrounding natural features, will be performed, and necessary repairs will be made. If a tear in the liner is identified, repairs to the geosynthetic materials shall be completed immediately by placing a patch over the torn sections and fusing the materials by patch-welding. The operator shall perform vacuum testing on the patch welds to ensure compliance with the standards established for the original liner construction. Patching will be performed under strict construction quality assurance protocols used during original liner construction and the RWQCB may be present to perform field observations at any time during the repair to ensure compliance with applicable regulations.	Field observation and letter from operator if additional testing required	If tear in liner is identified	Regional Water Quality Control Board		
MM 4.2-3	A monitoring and maintenance program that includes annual topographic surveys to measure settlement, quarterly visual inspections to identify damage to the final cover or gas systems, and repair of these systems as required shall be implemented. The frequency of monitoring may be reduced after closure of the landfill. The gas collection system shall be flexible to accommodate settlement and allow for repair. The County of San Diego Department of Environmental Health will perform inspections to ensure compliance.	Letter from operator based on field verification	Annual—topographic surveys Quarterly—visual inspections	County Department of Environmental Health		
MM 4.2-4	Additional inspection of the rock masses surrounding the landfill will be completed every 5 years and/or after a significant earthquake event in order to identify new areas of potential rockfall concerns. The applicant's geotechnical consultant shall submit a letter to the County of San Diego Department of Environmental Health after any such inspection summarizing findings and necessary actions.	Letter from applicant's geotechnical consultant	Every five years and/or after a significant seismic event	County Department of Environmental Health		
	4.3 HYDROGEOLOGY					
MM 4.3-1a	For the purpose of providing additional environmental assurance to the San Luis Rey Municipal Water District, in addition to the 13 monitoring wells surrounding the landfill, the water quality monitoring shall include	Written report by applicant's hydrogeologist	Annually	San Luis Rey Municipal Water District		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	at a minimum monitoring of two production wells (downgradient SLRMWD well #34 and upgradient Lucio well #2), upgradient alluvial monitoring well GMW-3, and downgradient alluvial monitoring well GLA-16 located within the project boundary).					
MM 4.3-1b	If contamination is detected in any monitored well, the landfill operator shall be responsible for treatment and disposal of contaminated water. The landfill operator shall ensure that impacted water is treated to acceptable water quality standards, consistent with existing background water quality as provided in CCR Title 27, Section 20400 (a)(1). Adequate treatment shall be implemented to maintain background levels established by the RWQCB at the time of issuance of the waste discharge requirements.	Field inspection and monitoring by applicant's hydrogeologist	If contamination is detected	Regional Water Quality Control Board and San Luis Rey Municipal Water District		
MM 4.3-1c	The Applicant shall provide to the San Luis Rey Municipal Water District simultaneously with the submission to the RWQCB data collected from the groundwater monitoring program and shall provide to the District and its consultants split samples from any groundwater monitoring station upon reasonable notice given before the next regularly scheduled sampling to enable the District to verify the data collected.	Data prepared by applicant's hydrogeologist	Simultaneously with submission to Regional Water Quality Control Board	San Luis Rey Municipal Water District		
MM 4.3-1d	Prior to the commencement of Phase I construction project grading, the Applicant shall provide the San Luis Rey Municipal Water District and the other parties to the Mitigation agreement with an irrevocable letter of credit in accordance with Section 9 and Exhibit C of the Mitigation Agreement. The Letter of Credit shall be automatically renewed annually.	Irrevocable letter of credit	Prior to commencement of Phase 1 construction grading	San Luis Rey Municipal Water District and other parties to the agreement [2]		
MM 4.3-1e	Prior to commencement of project operation, the Applicant shall establish, maintain, and administer a trust fund or third party custodial account for the benefit of the San Luis Rey Municipal Water District and the other parties to the Mitigation Agreement in accordance with	Verification of establishment of trust fund	Prior to commencement of operation	San Luis Rey Municipal Water District and other parties to the		

[2] The Agreement is between the San Luis Rey Municipal Water District, certain surrounding landowners, and Gregory Canyon, Ltd.

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	Section 9 and Exhibit C of the Mitigation Agreement.			agreement		
MM 4.3-1f	As a condition of any water rights appropriation permit that may be granted by the State Water Resources Control Board, the Applicant shall reduce its diversion of water if the amount of groundwater available within the San Luis Rey Municipal Water District based upon water rights as they existed on April 15, 1996 within the boundaries defined in the Mitigation Agreement, is insufficient to meet the reasonable and beneficial needs of the District or any of the landowners within the District.	Written verification of water usage	If groundwater supply is deemed to be insufficient	San Luis Rey Municipal Water District and other parties to the agreement		
MM 4.3-1g	The Applicant shall identify and use an alternate water supply for construction and operation of the project if the amount of groundwater available within the San Luis Rey Municipal Water District is insufficient to meet the reasonable and beneficial needs of the District or any of the landowners within the District.	Written verification of alternate supply	If groundwater supply is deemed to be insufficient	San Luis Rey Municipal Water District		
MM 4.3-1h	If the construction, operation, or closure of the landfill causes degradation of the Pala Basin water or quality of foreign water stored in the Pala Basin for use within the Pala Basin so that it cannot be used for domestic uses and for irrigation, the Applicant shall be liable to the San Luis Rey Municipal Water District to the extent of any degradation of the quality of Pala Basin water or the quality of foreign water stored in the Pala Basin caused by the construction, operation or closure of the landfill, including the cost of remediating the degradation of water quality attributable to the construction, operation or closure of the landfill, or if such remediation is not technologically or economically feasible, of providing an alternative water supply pending permanent remediation measures to the extent necessary to meet the reasonable needs for domestic and irrigation uses of the parties who signed the Mitigation Agreement. The applicant's liability with respect to foreign water shall be limited to remediation of a maximum of 17,694 acre-feet. Remediating the water quality of the Pala Basin or providing an alternative water supply, shall be part of the closure plan and part of the cost estimate required by 14 CCR § 17782.	Testing as required by RWQCB after consultation with SLRMWD	Reporting as required by RWQCB or SLRMWD Agreement	Regional Water Quality Control Board; San Luis Rey Municipal Water District		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.3-1i	The Applicant shall notify the San Luis Rey Municipal Water District and each of the parties to the Mitigation Agreement of any request to modify or to be released from the requirements of the closure plan or the post closure maintenance plan for the project.	Copy of request	At time of request	San Luis Rey Municipal Water District and other parties to SLRMWD Agreement		
MM 4.3-1j	The Applicant shall consult with the San Luis Rey Municipal Water District concerning the number, specifications, location, and frequency of data collection at the monitoring stations. The final decision regarding the need for and adequacy of the number, specifications, location of and frequency of data collection from the monitoring stations will be made by the RWQCB.	Discussion with SLRMWD	During discussions of monitoring with RWQCB	Regional Water Quality Control Board; San Luis Rey Municipal Water District		
	4.5 TRAFFIC AND CIRCULATION					
MM 4.5-1	The project applicant shall conduct a structural analysis of SR 76 and determine the structural requirements along SR 76 from the Rosemary's Mountain Palomar Aggregates project to the proposed landfill entrance to determine whether the existing foundation can accommodate anticipated heavy truck loads. The applicant shall obtain certification from Caltrans for adequate pavement surface to be enforced by the County Department of Public Works. This analysis shall not be extended west of the I-15 ramps if the Palomar Aggregates project does not go forward. Construction of the recommended pavement improvements, consistent with Caltrans requirements shall be implemented prior to operation of the landfill, if determined necessary, and fair share contribution made by the applicant.	Written report by applicant's traffic consultant Field inspection if improvements are necessary	Prior to acceptance of solid waste Prior to acceptance of solid waste	Caltrans and County Department of Public Works		
MM 4.5-2	At the commencement of operation, the project applicant shall make a fair-share contribution for the addition of an eastbound left turn lane and westbound through lane on the I-15 overcrossing.	Deposit receipt	At the commencement of operation	Caltrans and County Department of Public Works		
MM 4.5-3	The Project applicant shall make an irrevocable offer of dedication for right-of-way to 108 feet in width within the Project boundary for the widening of SR 76 to four lanes per the County of San Diego Circulation Element, including a designated bike route. In addition, the	Dedication of easement and deposit receipt	Request by Caltrans	Caltrans and County Department of Public Works		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	project applicant shall provide a fair share contribution for the cost to provide four lanes on SR 76 from the western boundary of the project site to the project access road.					
	4.6 NOISE AND VIBRATION					
MM 4.6-1a	The applicant shall monitor noise levels at the property lines adjacent to residential uses in the first year of the initial construction and whenever the construction operation changes. If noise levels exceed 62.5 dBA L_{eq} at the property line, the applicant shall implement some or all of the following measures to reduce the noise levels to below 62.5 dBA L_{eq}: • Build temporary noise barriers or berms between construction activities and residences. Such barriers or berms shall be disassembled when construction is complete. Sound barriers made of plywood would likely be sufficient, given the topography of the site and adjacent area. Other design parameters (e.g., height, length, and location) for these temporary noise barriers or berms shall be determined by a qualified noise expert. • Reduce the amount or size of construction equipment. For example, equipment with smaller engines could be used. This would be feasible for most types of equipment. However, the geology of the site may dictate the minimum size of certain types of rock moving or other equipment. If the 62.5 dBA L_{eq} threshold is not exceeded, no action beyond monitoring shall be necessary.	Monitoring at southern property line by applicant's noise expert to determine noise levels at nearby residences	Quarterly during initial construction and within 30 days after any change in construction phases	County Department of Environmental Health		
MM 4.6-1b	All construction activities shall be limited to between the hours of 7:00 A.M. and 6:00 P.M., Monday through Friday and 8:00 A.M. to 5:00 P.M. on Saturday as required under Proposition C. Construction shall not occur on Sundays or federal holidays.	Field inspection	During construction	County Department of Environmental Health		
MM 4.6-1c	The applicant shall ensure that construction equipment and trucks are properly tuned and have noise muffling equipment that meets or exceeds applicable EPA standards.	Field inspection	During construction	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.6-2a	The operator shall ensure that the tire shredding and rock crushing shall not occur at the same time.	Field inspection	During operation	County Department of Environmental Health		
MM 4.6-2b	Tire shredding operations shall be monitored the first time such activity is conducted on-site to ensure that noise levels do not exceed the residential and wildlife thresholds. If the noise levels exceed either threshold, the applicant shall implement noise abatement measures which may include such measures as equipment silencers, enclosures, noise baffling, and/or berms. If the thresholds are not exceeded, no additional action beyond monitoring shall be required.	Field inspection	During operation	County Department of Environmental Health		
MM 4.6-3	Noise verification shall be conducted specifically for the flare station prior to commencement of its operation to ensure compliance with the 62.5 dBA L_{eq} and 60 dBA L_{eq} at the property line and for wildlife habitat, respectively.	Noise analysis prepared by applicant's noise specialist	Prior to installation of the flare station	County Department of Environmental Health		
MM 4.6-4a	Unless determined infeasible by Caltrans, the project applicant shall provide a fair share contribution for the cost to install a sound wall in the right-of-way along SR 76 to reduce noise levels from cumulative traffic at the existing residences.[3]					
	4.7 AIR QUALITY & AIR TOXIC HEALTH RISKS					
MM 4.7-1	The construction contractor shall implement the following dust control measures: • The construction contractor shall use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel in these areas. • All unpaved haul roads shall be watered every two hours, unless the road surface appears visibly damp. • The construction contractor shall wet down the site in the late	Field verification	Field inspection during construction	San Diego Air Pollution Control District		

[3] A sound wall would also reduce the project-related increase in traffic noise levels.

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	morning and after work is completed for the day. • At least once per day, the construction contractor shall wet down non-active construction areas that have not been reseeded to minimize windblown dust. • As soon as feasible, the construction contractor shall re-establish groundcover on areas disturbed by construction—through seeding and watering those areas that will not be disturbed for extended periods (e.g., two months or more). • The construction contractor shall reduce traffic speeds on all unpaved road surfaces to no more than ten miles per hour. In addition, to reduce vehicle exhaust emissions: • The construction contractor shall maintain construction equipment engines by keeping them tuned in accordance with manufacturers specifications. • The construction contractor will only utilize California diesel fuel in heavy duty vehicles. • The construction contractor will only employ construction equipment that meets California Exhaust Emission Standards for Post-1996 Off-Road Compression-Ignition Engines.					

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
MM 4.7-2	The landfill operator shall implement the following dust control measures: • The landfill operator shall use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel in these areas. • The landfill operator shall wet down the site in the late morning and after work is completed for the day. • At least once per day, the landfill operator shall wet down non-active construction areas that have not been reseeded to minimize windblown dust. • The landfill operator shall reduce traffic speeds on all onsite, unpaved road surfaces to no more than ten miles per hour. In addition, to reduce vehicle exhaust emissions: • The landfill operator shall maintain trucks and construction equipment engines by keeping them tuned in accordance with manufacturers specifications. • The landfill operation shall only utilize California diesel fuel in heavy-duty vehicles. • The landfill operator shall only employ construction equipment that meet California Exhaust Emission Standards for Post-1996 Off-Road Compression-Ignition Engines.	Field verification	Field inspection during operation	San Diego Air Pollution Control District		
	4.9 BIOLOGICAL RESOURCES					
MM 4.9a:	A pre-construction meeting shall take place with a qualified biologist and construction personnel. The biologist shall explain the access restrictions on site, the importance of remaining within construction zones, the sensitivity of the habitats and species on site, and shall explain the potential consequences of violating the access restrictions and impacting biological resources outside the construction zones. Any accidental impacts to sensitive habitat that occur outside the designated impact area shall be mitigated at a 3:1 ratio. A letter from the applicant's biologist and contractor(s) verifying receipt of biological	Letter from applicant's contractor(s) verifying receipt of biological information	Prior to commencement of construction	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	information shall be provided to the County Department of Environmental Health prior to commencement of construction.					
MM 4.9-1a:	Impacts to coastal sage scrub and coastal sage scrub/chaparral shall be mitigated at a minimum ratio of 2:1 through on-site preservation of coastal sage scrub and coastal sage scrub/chaparral in dedicated open space. A total of 445.8 acres shall be required for mitigation, including 88.2 acres of coastal sage scrub/chaparral and 357.6 acres of coastal sage scrub. To satisfy the coastal sage scrub/chaparral requirement, coastal sage scrub shall be utilized. The mitigation acres shall be preserved in perpetuity as on-site open space.	Verification of recordation of open space easement on site encompassing the coastal sage scrub and coastal sage scrub/ chaparral mitigation areas	Prior to commencement of brushing or clearing of coastal sage scrub and coastal sage scrub/ chaparral or at a point in time determined appropriate through consultation with the applicable regulatory agencies	County Department of Environmental Health and Department of Planning and Land Use		
MM 4.9-1b:	Impacts to southern willow scrub and mule fat scrub shall be mitigated by the creation of in-kind habitats on the landfill site in dedicated open space. A mitigation ratio of 4:1 shall be used. A total of 10.4 acres shall be required for mitigation including 9.6 acres of southern willow scrub and 0.8 acre of mule fat scrub. The habitat creation can occur in the locations for riparian habitat creation shown on Exhibit 4.9-5.	Preparation of mitigation plan by applicant's biologist. Letter approval of plan by resource agencies.	Prior to commencement of clearing or grading of the southern willow scrub and mule fat scrub or as otherwise determined in consultation with resource agencies	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	Habitat creation of southern willow scrub and mule fat scrub shall occur at the ratio specified herein, such that "no net loss" of habitat is achieved, in areas that would not be affected by noise levels equal to or greater than 60 dB(A) L_{eq} and that are part of the dedicated open space on site. Conditions to be met shall include the preparation of a detailed mitigation plan, final landscape construction documents, ACOE/CDFG permit approval, and installation, maintenance, and long term monitoring of the mitigation areas. The mitigation plan shall be developed and submitted to the ACOE and CDFG for approval as part of the project permitting process. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the resource agencies.	Preparation of mitigation plan by applicant's biologist. Letter approval of plan by resource agencies. Field verification of plan implementation by applicant's biologist	Prior to issuance of grading permit or as otherwise determined in consultation with resource agencies	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-1c:	Impacts to 0.8 acre of open channel shall be mitigated through implementation of the habitat enhancement plan described in MM 4.9-18 to restore habitat in the San Luis Rey River watershed on site.	Preparation of a habitat enhancement plan by the applicant's biologist	After residences and dairy removed	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and Department of Planning and Land Use		
MM 4.9-1d:	Impacts to 27.0 acres of coast live oak woodland (some of which includes Engelmann oaks and is state jurisdictional habitat) shall be mitigated at a 3:1 ratio through on-site preservation of 30.0 acres of in-kind habitat in dedicated open space off-site acquisition of a minimum of 51.0 acres of in-kind existing coast live oak woodland or a combination of preservation/acquisition and 5.9 acres of habitat creation to ensure a "no net loss" of state jurisdictional habitat. Within the 51-acre off-site mitigation parcel, the species-specific mitigation for Engelmann oaks shall be met, if possible (see MM 4.9-2). If an increase in on-site preservation occurs, the amount of off-site habitat acquisition	Copy of recorded open space easement on site and for a parcel(s) off site encompassing the oak woodland mitigation area(s). If on	Prior to commencement of clearing or grading of the coast live oak woodland or as otherwise determined in consultation with the County	California Department of Fish and Game, County Department of Environmental Health and Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	shall be reduced accordingly. If creation is required, the amount of off-site habitat acquisition shall be reduced accordingly. The off-site acquisition shall occur in an unincorporated area of San Diego County. The habitat creation shall be implemented to the satisfaction of the County and CDFG in accordance with Section 1600 of the State Fish and Game Code. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. If possible, individual oak trees shall be salvaged from impact areas and transplanted to appropriate open space habitat on site. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County and CDFG.	site habitat creation is implemented, preparation of mitigation plan by applicant's biologist. Letters of approval of plan by resource agencies. Field verification of plan imple-mentation by applicant's biologist				
MM 4.9-1e:	Impacts to 0.2 acre of native perennial grassland shall be mitigated at a ratio of 2:1 by the acquisition of 0.4 acre of in-kind habitat in an unincorporated area of San Diego County, and a conservation easement shall be placed across the mitigation area to permanently protect the resource. Acquisition of grassland habitat shall occur as part of the acquisition of coast live oak woodland habitat (MM 4.9-1d) or Engelmann oak habitat (MM 4.9-2), if possible. The implementation of the mitigation shall be prior to or concurrent with construction or as determined in consultation with the County.	Copy of recorded open space easement off site encom-passing native perennial grassland. Preparation of mitigation plan by applicant's biologist. Letter approval of plan by resource agencies. Field verification of plan	Prior to or concurrent with construction or as determined in consultation with the County	County Department of Environmental Health and County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
		implementation by applicant's biologist				
MM 4.9-1f:	Temporary construction fencing shall be erected under the supervision of a qualified biologist outside the delineated boundary of dedicated open space where it interfaces with impact areas and permanent fencing marked with signs shall be installed around the mitigation areas. Where impact areas are adjacent to coast live oak woodland, fencing shall be erected outside the canopy area at a distance of 1.5 times the canopy radius of the outer trees. This fencing shall be erected prior to commencement of brushing or grading activities. The fencing (for example, strand wire or split rail) shall restrict human and equipment access but shall allow for wildlife movement.	Letter from applicant's biologist/field verification	Prior to commencement of brush clearing or grading	County Department of Environmental Health		
MM 4.9-2:	A 3:1 minimum replacement acreage (based on canopy area) of Engelmann oak trees shall be preserved within the same acquisition parcel for coast live oak woodland, if possible (see MM 4.9-1d). Otherwise, a separate acquisition of Engelmann oak trees at a 3:1 minimum replacement acreage shall be required in an unincorporated area of San Diego County. This acreage shall then be subtracted from the coast live oak woodland mitigation requirement (MM 4.9-1d) to avoid duplicate mitigation. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Letter from applicant's biologist	Prior to commencement of construction in the area of Engelmann oak or at a point in time as determined appropriate through consultation with the County of San Diego	County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-3a:	In addition to the riparian habitat creation in MM 4.9-1b, implementation of a habitat enhancement program described in MM 4.9-18 shall be undertaken to mitigate impacts to arroyo southwestern toad riparian breeding habitat.	See MM 4.9-1b and MM 4.9-1d	See MM 4.9-1b and MM 4.9-1d	See MM 4.9-1b and MM 4.9-1d		
MM 4.9-3b:	The removal of toad riparian breeding habitat from riparian vegetation clearing and channel excavation for the bridge shall occur from October through December to minimize potential impacts to breeding adults (including potential sedimentation impacts to toad eggs) and dispersing	Construction contract addressing timing	Prior to commencement of construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	juveniles.			Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-4:	The project preserves approximately 243 acres of sandy upland habitat adjacent to toad breeding habitat on site in addition to approximately 970 acres of other upland habitats. This preservation, in combination with the habitat enhancement program described in MM 4.9-18 would mitigate impacts to the loss of potential toad upland habitat.	Field verification by applicant's biologist	Field verification prior to commencement of bridge construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-5a:	The construction zone for the bridge shall be fenced with exclusion fencing to prevent toad access to the construction zone. The fencing shall be a silt-screen type barrier comprised of a minimum 24-inch high fence with the remainder (minimum 12 inches) anchored firmly against the ground. The fence may be buried if necessary to exclude toad access. The fence locations shall be identified by a qualified biologist and adjusted as necessary.	Letter from applicant's biologist based on field verification	Prior to commencement of construction of bridge	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
	Exclusion fencing shall be monitored daily by a qualified biologist, and maintained in its original condition by construction personnel for the entire length of the construction period.	Written report from applicant's biologist monthly	Daily monitoring	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health, County Department of		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
				Planning and Land Use		
MM 4.9-5b:	Pre- and post-exclusion fencing surveys within the construction zone for the bridge shall be conducted for arroyo southwestern toads by a biologist permitted by the USFWS to handle the toad. Prior to construction commencement, a minimum of three surveys shall be conducted by this biologist following installation of the fencing. Daily surveys shall be conducted each morning prior to construction activity. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Written report from biologist permitted by U.S. Fish and Wildlife Service to handle toad	Prior to construction, minimum of 3 surveys following installation of the fencing, then daily surveys before construction begins	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-5c:	Exclusion fencing shall be installed along both sides of the access road for its entire length (except where sides of bridge act as barrier) as part of access road construction. The same exclusion fencing shall also wrap around the northern edge of the facilities area and continue east and south around the 1.8-acre desiltation basin. The fencing shall continue until the topography becomes too steep or rocky on the east side of the landfill footprint as determined by a qualified biologist. The fencing shall be of a corrugated metal or other similar durable material and shall be a minimum of 24 inches high.	Field verification	At the time of access road construction	County Department of Environmental Health or County Department of Planning and Land Use		
MM 4.9-5d:	A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of the exclusion fencing along the access road and prior to access road use. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Written report from biologist permitted by U.S. Fish and Wildlife Service to handle toad	Following installation of exclusion fencing and prior to access road use	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-5e:	A minimum of three surveys shall be conducted by a biologist permitted	Written report	Following	U.S. Fish and Wildlife		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	by the USFWS to handle the arroyo southwestern toad following installation of exclusion fencing around the facilities area and desiltation basin as described in MM 4.9-5c. Up to three additional surveys shall be conducted if favorable temperature and moisture conditions for toad activity have not already occurred during the first three surveys. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	from biologist permitted by U.S. Fish and Wildlife Service to handle toad	installation of exclusion fencing	Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-5f:	At least one road undercrossing shall be installed in the fill beneath the access road north and south of the river. The design of the undercrossings shall be approved by the USFWS.	Field verification	At the time of access road construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-5g:	Exclusion fencing of the material and design described in MM 4.9-5c shall be installed on the north side of the haul road to Borrow/Stockpile Area A. The fencing shall be installed prior to initial project construction and shall be removed when initial project construction is complete, and the haul road is no longer in use. The exclusion fencing shall be re-installed prior to the use of Borrow/Stockpile Area A, which begins again in approximately year 25. The fencing shall be removed once the landfill is completely closed and the haul road is no longer in use.	Field verification	Prior to construction and during inspection by Department of Environmental Health	County Department of Environmental Health or County Department of Planning and Land Use		
MM 4.9-5h:	A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation and re-installation of the exclusion fencing along the access road to Borrow/Stockpile Area A prior to its use. Up to three additional surveys shall be conducted during the use period if favorable	Written report from biologist permitted by U.S. Fish and Wildlife	Following installation and re-installation of exclusion fencing along the access	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	temperature and moisture conditions for toad movement have not already occurred during the three original surveys. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Service to handle toad	road to Borrow/Stockpile Area A	Environmental Health and County Department of Planning and Land Use		
MM 4.9-5i:	Exclusion fencing of the material and design described in MM 4.9-5c shall be installed along both sides of the low-flow crossing until the road connects with the haul road described in MM 4.9-5g. The fencing shall be installed during initial project construction and shall be removed when initial project construction is complete, and the crossing is no longer in use. A minimum of three surveys shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of the fencing, and daily surveys shall be conducted each morning prior to use of the low-flow crossing. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space.	Field verification	During initial project construction (3 surveys following installation of fencing and daily prior to use of low-flow crossing) and after crossing is no longer in use.	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-6:	The USFWS (1999c) has indicated in the Final Recovery Plan for the species that short-term negative effects to individual toads from such activities may be offset by the long-term positive effects of implementing such a habitat enhancement program. Therefore, the habitat enhancement plan described in MM 4.9-18 shall be implemented. The final plan shall include precautions where possible to avoid impacts to the arroyo southwestern toad.	Preparation and acceptance of habitat enhancement plan	Prior to construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-7:	Prior to final design, the bridge abutment design specifications shall indicate that gaps in the riprap be filled with concrete.	Approval of final design plans	Final design submittal	County Department of Environmental Health, County Department of Planning and Land Use		
MM 4.9-8:	The northernmost tower shall be replaced during the period of July	Construction	Prior to	U.S. Fish and Wildlife		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	through October to avoid the golden eagle breeding season.	contract addressing timing	commencement of construction	Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-9a:	Access to the Gregory Canyon nesting site(s) shall be restricted to eagle specialists and researchers conducting monitoring.	Field verification	Prior to commencement of construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-9b:	Prior to ground disturbance, a pre-construction survey for the eagle pair shall be conducted to determine if and where the eagles are nesting on site. Weekly monitoring of the eagle pair shall be conducted by an eagle specialist during the breeding season (December through May) to confirm the eagle pair is exhibiting reproductive behavior patterns, such as nest building. After one year of construction activity, if the monitoring determines that the eagles have abandoned the site, the applicant shall create a habitat acquisition fund for purchase and preservation of off-site known or potential golden eagle nesting habitat or shall purchase an equivalent amount of golden eagle nesting habitat to be included in the MSCP Preserve. The amount of funding or habitat purchase shall be negotiated with the County.	Written report by biologist, payment of fees, if applicable	Prior to construction weekly during breeding season, and one year after construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-9c:	Initial landfill construction activity less than 2,000 feet from the eagle's nest shall begin as close to the end of the eagle breeding season in June	Field verification	Prior to commencement of	U.S. Fish and Wildlife Service, California		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	to allow the eagle pair on site to become conditioned to the activity prior to the next breeding season starting in December.		construction	Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-10:	The southernmost tower shall be moved during the period of June through November or at any time when the nest is not active. Likewise, any raptor nest removal shall only occur when the nest is inactive. A qualified biologist shall determine whether or not a raptor nest is active.	Construction contract addressing timing and field verification	During June through November or when nest is inactive	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-11a:	Removal of any riparian habitat shall only occur from October through December to avoid the breeding seasons of these bird species and to minimize potential impacts to the arroyo southwestern toad.	Preparation of mitigation plan by applicant's biologist. Letters of appropriate planning resource agencies	Prior to commencement of clearing or grading of riparian habitat	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-11b:	Impacts to vireo and flycatcher habitat shall be mitigated through riparian habitat creation as described under MM 4.9-1b. The habitat enhancement described under MM 4.9-18 would also benefit these species.	Preparation of mitigation plan by applicant's biologist.	Prior to commencement of clearing or grading of vireo and	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
		Letters of appropriate planning resource agencies	flycatcher habitat or as otherwise determined in consultation with resource agencies	of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-11c:	The project applicant shall provide funding for cowbird trapping along the San Luis Rey River on the project site for a period of five years from initial landfill operation.	Written report prepared by the applicant's biologist or the land manager of the 1,313 acres of open space	Annually	California Department of Fish and Game, U.S. Fish and Wildlife Service		
MM 4.9-12a:	Daily noise monitoring by a qualified acoustician shall be conducted between March 15 and September 15 during initial construction to verify that noise levels are below 60 dB(A) L_{eq} in vireo and flycatcher habitat. If the 60 dB(A) L_{eq} is exceeded, the acoustician shall work with the construction contractor to make operational changes and/or barriers designed by the acoustician shall be installed prior to March 15 or immediately if during the breeding season, to reduce noise levels during the breeding season. Weekly noise monitoring shall occur following operational changes and/or installation of barriers to ensure their effectiveness. If ineffective, the acoustician shall work with the construction contractor to make additional operational changes or to install other barriers that would reduce noise to less than 60 dB(A) L_{eq}.	Noise analysis prepared by applicant's noise specialist	Daily between March 15th and September 15th during initial construction. If noise barriers are required, weekly monitoring to ensure their effectiveness	County Department of Environmental Health		
MM 4.9-12b:	The low-flow crossing shall only be used between September 15 and March 15. Use of the crossing could occur outside of that time period if daily monitoring by a qualified biologist determines that vireos and flycatchers have not yet arrived on site or have migrated out of the area early, or if operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60 dB(A) L_{eq} in the vireo and flycatcher habitat. Daily noise	Field verification by biologist. Noise analysis prepared by applicant's noise specialist	Daily between September 15th and March 15th	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	monitoring shall be conducted in accordance with MM 4.9-12a and noise reduction measures contained in MM 4.9-12a shall be implemented, if necessary.					
MM 4.9-12c:	Bridge construction shall only occur between September 15 and March 15 unless daily monitoring by a qualified biologist during the breeding season determines that vireos and flycatchers have not yet arrived on site or have migrated out of the area early or if operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60 dB(A) L_{eq} in vireo and flycatcher habitat. Daily noise monitoring shall be conducted in accordance with MM 4.9-12a and noise reduction measures contained in MM 4.9-12a shall be implemented, if necessary.	Field verification by biologist. Noise analysis prepared by applicant's noise specialist	Daily between September 15th and March 15th	County Department of Environmental Health		
MM 4.9-13:	Mitigation activities shall only occur between September 15 and March 15 unless operational changes can be made and/or barriers designed by an acoustician can be installed prior to March 15 to reduce noise levels to less than 60 dB(A) L_{eq} in vireo and flycatcher habitat. Daily noise monitoring shall be conducted between March 15 and September 15 to verify that the measures are effective. If the 60 dB(A) L_{eq} is exceeded, the acoustician shall work with the contractor to make additional operational changes or to install additional barriers that would reduce noise to less than 60 dB(A) L_{eq}.	Field verification by biologist. Noise analysis prepared by applicant's noise specialist	Daily between September 15th and March 15th	County Department of Environmental Health		
MM 4.9-14a:	A total of 4.8 acres of vireo and flycatcher habitats (0.2 acre of cottonwood-willow riparian forest, 0.8 acre of mule fat scrub, and 3.8 acres of southern willow scrub) shall be created on the landfill site in dedicated open space in an area that would not be affected by noise levels equal to or greater than 60 dB(A) L_{eq} (Exhibit 4.9-5) in conjunction with that created on site for direct impacts as described in MM 4.9-1b and MM 4.9-1c.	Preparation of reserved area by applicant's biologist and noise testing and report to verify less than 60 dB	Prior to construction	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.9-14b:	The project applicant shall purchase and conserve in perpetuity 4.6 acres of off-site vireo and flycatcher habitat that would not be affected by noise levels of 60 dB(A) L_{eq} or greater as a result of project-generated or cumulative traffic. A conservation easement shall be placed across the off-site mitigation area to permanently protect the vireo and flycatcher habitat. The implementation of the mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Preparation of reserved area by applicant's biologist and noise testing and report to verify less than 60 dB	Prior to construction	U.S. Fish and Wildlife Service, Army Corps of Engineers, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-15a:	A temporary 12-foot high wall or berm shall be constructed along the northern edge of Borrow/Stockpile Area A outside the vireo/flycatcher breeding season (March 15 to September 15) and prior to the use of Borrow/Stockpile Area A. The barrier can be removed once topography provides the necessary noise barrier to reduce noise levels in the habitat during the breeding seasons to less than 60 dB(A) L_{eq}.	Construction contract addressing timing and noise analysis	Prior to use of Borrow/ Stockpile Area A	County Department of Environmental Health		
MM 4.9-15b:	Noise monitoring shall be conducted weekly for up to one month by a qualified acoustician to verify that operational noise levels are below 60 dB(A) L_{eq} in vireo and flycatcher habitat. If noise levels equal or exceed 60 dB(A) L_{eq}, a 16-foot high permanent noise wall shall be installed prior to the vireo breeding season (March 15 to September 15, includes flycatcher breeding season) or immediately if during the breeding season. If noise levels exceed 60dB(A) L_{eq} during the breeding season, operational changes shall be made to reduce noise levels to less than 60 dB(A) while the noise wall is being constructed. The noise wall shall be constructed east of the knoll between the internal haul road and the top of slope for the facilities area to block truck noise emanating into the habitat.	Noise analysis prepared by applicant's noise specialist	During operations weekly, up to one month March 15th to September 15th, in necessary	County Department of Environmental Health		
MM 4.9-16:	Throughout the life of the project, access routes shall be restricted to existing roads, and entry into non-impact areas shall be restricted by the landfill operator. Areas not directly impacted by the project shall be posted with signs precluding access due to habitat sensitivity. A public	Field verification. Preparation and submittal of	Throughout life of project	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	education program shall be developed by a qualified biologist and shall be implemented to inform landfill staff and visitors about access restrictions and the sensitivity of habitats on site.	public education program				
MM 4.9-17a:	Control of invasive, exotic plant species shall occur as described in the habitat enhancement plan presented in MM 4.9-18 and shall include the channel excavation area associated with construction of the bridge.	Preparation and acceptance of Habitat Enhancement Plan	Prior to construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-17b:	Temporary and permanent slopes shall be revegetated with native plant species to inhibit the growth of non-natives.	Preparation and acceptance of Habitat Enhancement Plan	Prior to construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-18:	The project applicant shall implement a habitat enhancement plan to improve the San Luis Rey River watershed on site as described below and detailed in Appendix L of this document. Beyond the mitigation obligation associated with compensating for direct and indirect project impacts to vegetation communities, the project applicant for the Gregory Canyon Landfill shall be required to implement a habitat enhancement program for improvements to the San Luis Rey River watershed. In addition to the proposed open space dedication (1,313 acres), the project applicant shall restore approximately 88 acres of upland and 13 acres of riparian area within	Preparation and acceptance of Habitat Enhancement Plan	Prior to construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	the portion of the San Luis Rey River corridor contained on site (Exhibit 4.9-5). The restoration will likely be phased and not occur all at one time. The habitat enhancement program shall focus on the restoration of riparian and upland habitats within the San Luis Rey River floodplain on site above and beyond the project's direct mitigation obligations for vegetation community impacts. The San Luis Rey River has been identified as one of the most easily restorable rivers in southern California (ACOE 1981). This portion of the program shall consist of the restoration of lost and/or damaged habitat and water quality caused by the long-term agricultural use of the property and the removal of highly invasive, exotic plant species. The project applicant is proposing to remove the existing Verboom dairy operations and most structures and all equipment associated with the Verboom and Lucio dairies from the site in concert with the initial construction of the landfill. Under this enhancement program, man-made berms and weed seed banks in the river's watershed shall be excavated to restore more historic river flows and invasive, non-native plant species would be replaced with native plantings. The excavation shall be focused on bringing the ground elevations down to level that would connect the areas hydrologically with the existing groundwater system and to create a series of terraces that taper into the existing upland habitat. The excavation would be done in a manner that would prevent adverse effects on upstream and downstream properties. All upland and drier riparian areas shall be planted with tree species native to the site and hand-seeded to initiate native plant re-establishment. Weed control and monitoring shall be implemented regularly during the first five years of each phase of restoration to prevent the re-establishment of non-native plant species. The goal of the restoration shall be to provide breeding and upland habitat for endangered species and widen the vegetative buffer around the riparian corridor present on site. The dedicated open space on site, including the restored river corridor, shall be managed with a financial contribution provided by the project applicant. The project applicant shall work with the USFWS and the CDFG to identify a qualified conservancy or other non-profit					

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	organization to be responsible for implementing long-term management activities for the restored river. The type of management activities shall depend upon the condition of the site, the resources present, and the funds available to manage those resources. Management activities shall include restrictions on vehicular and human access through the installation of fencing and signs, control of exotic species [e.g., brown-headed cowbirds and giant reed (*Arundo donax*)], control of illegal dumping, and monitoring endangered species populations.					
	4.10 PALEONTOLOGICAL RESOURCES					
MM 4.10-1a	Prior to issuance of the grading permit by the County, the applicant shall retain a qualified paleontologist to monitor excavations on site. Initially monitoring shall occur eight hours per week (e.g., two four-hour days or four two-hour days) during earthmoving activities in the Quaternary Alluvium. (This earthwork is to occur during construction of the bridge footings and roads and the excavation of the borrow sites.) The contractor shall notify the qualified paleontologist at the time such activities will be initiated so that a monitor can be present. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall work under the direction of a qualified paleontologist.) The applicant shall submit a letter to the Department of Environmental Health identifying the monitor. Weekly letters shall be prepared by the monitor and provided to the Department of Environmental Health.	Letter to County identifying paleontologist and paleontological monitor prior to grading; Field observation initially eight hours per week with weekly letter prepared by paleontological monitor	During construction of bridge footings and roads and the excavation of the borrow sites	County Department of Environmental Health		
MM 4.10-1b	If unique fossils are discovered, the applicant shall have a qualified paleontologist (or paleontological monitor) recover them. If an extended salvage period is required, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossils in a timely manner. If necessary, the paleontologist shall be allowed to set up a screen-washing operation to process the matrix to bulk sample selected geologic beds	Letter from applicant's paleontologist based on field observation	After recovery of unique fossils, if any are found	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	If unique fossils are found, the applicant's paleontologist shall provide a letter to the Department of Environmental Health documenting the find and procedures followed on-site.					
MM 4.10-1c	The applicant shall have a qualified paleontologist clean, repair, and catalog any fossil remains collected during monitoring and salvage operations. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections such as, the San Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support from the applicant for initial specimen storage. If fossil remains are found, the Department of Environmental Health shall review the preserved materials.	Review of preserved materials	If fossil remains are found on site	County Department of Environmental Health		
MM 4.10-1d	The applicant shall have a qualified paleontologist prepare regular biannual progress reports during earth moving activities in the Quaternary Alluvium (this earthwork to occur during construction of the bridge footings and roads and the excavation of the borrow sites) and a final summary report that outline the results of the resources mitigation program. These reports shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and the significance of recovered fossils. These reports shall be submitted to the Department of Environmental Health.	Written reports by applicant's paleontologist	Biannual and final summary report	County Department of Environmental Health		
	4.11 ARCHAEOLOGICAL & CULTURAL RESOURCES					
MM 4.11-1	Prior to project activity occurring at the cemetery, the applicant shall remove the cemetery by excavation of burials and rebury in a nearby active cemetery. Exhumation and re-interment of all remains from this cemetery shall be conducted in accordance with Section 7050.5 of the California Health and Safety Code.	Written verification from the applicant's archaeologist	Prior to project activity occurring in the area	County Department of Environmental Health		
MM 4.11-2	It is possible that additional cultural resources could be discovered during grading and construction. Therefore, prior to issuance of a grading permit, the applicant shall retain a professional, registered archaeologist who is approved by the County and, if appropriate, a	Requirements of monitoring program noted on construction	Prior to issuance of grading permit; during construction	County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	Native American monitor, who is selected from a list of suitable candidates obtained from the Native American Heritage Commission. The archaeologist and, if appropriate, the Native American monitor shall implement a monitoring and data recovery program to the satisfaction of the County's Director of Planning and Land Use, to mitigate potential impacts to previously undiscovered archaeological resources. The monitoring program shall consist of the monitor(s) attending a pre-grading meeting with the contractors to explain and coordinate the requirements of the program. In addition, the archaeologist and, if appropriate, the Native American monitor shall monitor initial grading and ground surface preparation on all previously undisturbed areas. The requirements of the monitoring program shall be noted on the final grading or improvement plan and all site workers shall be informed in writing by the project archaeologist of the restrictions regarding disturbance and removal of cultural resources as well as procedures to follow should a resource deposit be detected.	documents; copy of letter to site workers; written report by applicant's archaeologist				
	In the event of notification by the project archaeologist that a potentially significant or unique find has been unearthed, grading operations shall cease immediately in the area of the find until the geographic extent and scientific value of the resource can be reasonably verified. Isolates and clearly non-significant deposits shall be minimally documented in the field. If significant archaeological materials are discovered, the County archaeologist shall be consulted and the resources shall be recorded and recovered using standard professional archaeological methods. Once recovered, such resources shall be cleaned, catalogued, and permanently curated according to current professional repository standards. Construction in the affected area shall not resume until the archaeologist determines it to be appropriate.	Consultation with County archaeologist, as needed; written report by applicant's archaeologist	During construction	County Department of Planning and Land Use		
	In the event that human remains are discovered, other than those located at the Higgins Family Cemetery, during the monitoring program, there shall be no further excavation or disturbance of the site, nor shall there be any disposition of such human remains, other than in accordance with the procedures and requirements set forth in Section 7050.5 of the	Written report by applicant's archaeologist	During construction	County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	California Health and Safety Codes. If Native American burial sites are discovered, the project shall comply with the Public Resources Code 5097.98 and CEQA Guidelines Section 15064.5(e). Upon completion of earth disturbing activities and prior to operation of the project, the archaeological monitor shall prepare a report documenting the findings. This report shall be completed to the satisfaction of the County's Director of Planning and Land Use.	Written report by applicant's archaeologist	Prior to operation of the project	County Department of Planning and Land Use		
MM 4.11-3	Prior to commencement of any construction activities, the applicant shall have a registered, professional archaeologist who is approved by the County and, if appropriate, a Native American monitor who is selected from a list of suitable candidates obtained from the Native American Heritage Commission provide measures to ensure the avoidance of impacts to known significant/CR-eligible cultural sites that could be indirectly affected by the proposed project (including: CA-SDI-683; CA-SDI-744B/12,584 A and B; CA-SDI-12,585; CA-SDI-14,609; and CA-SDI-14,610H). Such measures, which would serve to prohibit access to these sites, may include fencing, barricades, or remote monitoring devices. These devices shall be installed by the applicant prior to disturbance in the area of the above sites.	Mitigation monitoring program prepared by applicant's archaeologist	Prior to commencement of construction	County Department of Planning and Land Use		
	In addition, the archaeologist and, if appropriate, the Native American monitor shall implement a monitoring program to the satisfaction of the County's Director of Planning and Land Use. The requirements of the monitoring program shall be clearly noted on the final grading or improvement plan and all site workers shall be informed in writing of the restrictions and procedures of the program. In addition, the monitor(s) shall attend a pre-grading meeting with the contractors to explain and coordinate these requirements as they pertain to these significant/CR-eligible cultural sites. In addition, the archaeologist and, if appropriate, the Native American monitor shall monitor initial grading and ground surface preparation on all previously undisturbed areas. Concurrent to the monitoring of grading, the monitor(s) shall identify and evaluate whether adverse	Requirements of monitoring program noted on construction drawings; copy of letter to site workers Field observation by applicant's archaeologist;	Prior to construction During construction activities; approval of written report prior to operation of	County Department of Planning and Land Use County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	impacts (e.g., erosion, looting, vandalism, etc.) have occurred at any of these sites.	written report by applicant's archaeologist	the project			
	In the event that monitoring reveals deteriorating conditions at any of the significant/CR eligible cultural sites, the County archaeologist shall be consulted and the appropriate site preservation and/or data recovery efforts shall be implemented. Such efforts could include implementation of erosion control measures, capping of the affected portion of the site, or planting of native vegetation. If the monitor(s) determine that deterioration has resulted from landfill operations, a change in operational methods may be required.	Consultation with County archaeologist, if necessary; written report by applicant's archaeologist	During construction	County Department of Planning and Land Use		
	Upon completion of earth disturbing activities, the archaeological monitor shall prepare a report. The report shall include the results of the fieldwork and all appropriate laboratory and analytical studies that were performed in conjunction with any resource excavation that may have been performed. Such analyses could include radiocarbon dating, hydration and sourcing analysis, and mass spectrometer and thin sectioning, as appropriate. The report shall be submitted to the County's Director of Planning and Land Use for review and approval prior to operation of the project.	Written report by applicant's archaeologist	Prior to operation of the project	County Department of Planning and Land Use		
MM 4.11-4	The Research Requirements and Research Design for CA-SDI-745, included in Appendix N of this Final EIR, shall be followed. The Research Requirements and Research Design guides the analysis and curation of resources already recovered from Locus A and outlines the steps necessary for the completion of additional fieldwork and monitoring at Locus F. Included therein is the requirement for artifacts to be processed and curated according to current professional repository standards and transferred, including title, to an appropriate curation facility within San Diego County. The applicant is also required to pay the necessary fees for permanent curation. A report documenting the analysis and fieldwork results shall be prepared and submitted to the satisfaction of the County's Director of Planning and Land Use.	Written report by applicant's archaeologist	Prior to acceptance of waste	County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.11-5	A complete analysis of materials collected from CA-SDI-14,611H, the Maggie Lovell Homestead, shall be conducted under the supervision of a registered, professional archaeologist. These artifacts shall be processed and curated according to current professional repository standards and shall be transferred, including title, to an appropriate curation facility within San Diego County. The applicant shall pay the necessary fees for permanent curation. A report documenting the analysis results shall be prepared and submitted to the satisfaction of the County's Director of Planning and Land Use prior to operation of the project.	Written report by applicant's archaeologist	Prior to acceptance of waste	County Department of Planning and Land Use		
MM 4.11-6a	Increased intervals of water application (every three hours) on access roads, stockpiles, and cleared areas will mitigate impacts from dust to a less than significant level. Landscaping shall be installed between the landfill and CA-SDI-313/4,356 will serve as a dust screen and will reduce visual impacts created by fugitive dust and landfill operations. The landscaping should be installed a sufficient distance from the project site so as not to create a fire hazard.	Field inspection	At time of field inspection	County Department of Environmental Health		
MM 4.11-6b	In addition to mitigation measures MM 4.11-6a, the applicant shall have a professional rock art conservator provide baseline data and periodically assess the condition of Medicine Rock. The method for monitoring shall be developed in consultation with the Pala Band of Mission Indians and approved by County DEH. Baseline data shall be collected prior to any construction activity on the project site. Because the archaeological site is not located on the project site or on the Pala Reservation, implementation of the measure would require approval by the adjacent property owner.	Field inspection	Prior to any construction activities on site; and once every six months during construction	County Department of Environmental Health		
	4.12 ETHNOHISTORY & NATIVE AMERICAN INTERESTS					
MM 4.12-1a	Prior to commencement of operation of the landfill and as partial fulfillment of MM 4.1-2, the applicant shall either dedicate the portion of the site east of the landfill footprint and relocated SDG&E easement including the western slopes and the top of Gregory Mountain, as permanent open space or execute and convey a permanent open space	Execution of easement	Prior to operation of landfill	County Counsel and County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	easement over this area.					
MM 4.12-1b	Prior to commencement of operation of the landfill the applicant shall execute and record an access easement to the Pala Band of Mission Indians from the western boundary of the land owned by the Pala Band of Mission Indians to the summit of Gregory Mountain. The access easement shall grant the Pala Band of Mission Indians the right to walk or hike only within the access easement area.	Recordation of access easement	Prior to operation of landfill	County Counsel and County Department of Environmental Health		
MM 4.12-1c	Should the Pala Band agree, the applicant shall, upon commencement of operation of the landfill, pay to the Pala Band of Mission Indians a fixed dollar amount as determined below. Such amount shall be used by the Pala Band to implement measures to enhance and improve access to Gregory mountain from the Pala Reservation. Such measures may include, but are not limited to, a new footpath, clearing of an existing footpath, or the marking of new footpath trail as determined by Pala in its sole discretion. Such dollar amount shall be equal to the estimated cost of restoring the footpath that previously existed from the eastern base of Gregory Mountain to the top of the mountain. This estimate shall be obtained by the applicant from a company experienced in restoring footpaths.	Letter from applicant	Prior to operation of landfill	County Department of Environmental Health		
MM 4.12-1d	In addition to the construction of the trail, should the Pala Band agree, the applicant shall provide funding as needed for the annual maintenance of the trail from the eastern base to the top of the mountain during the operational life of the landfill.	Letter from applicant	Annual	County Department of Environmental Health		
MM 4.12-1e	The applicant shall postpone landfilling activities on the western slope of Gregory Mountain above the existing San Diego Gas & Electric transmission line for as long as its practically possible.	Letter from applicant	Annual	County Department of Environmental Health		
MM 4.12-2a	The applicant shall apply water on access roads, storage piles, and cleared areas in greater intervals, such as every three hours, during high wind periods to reduce the dust generated by vehicles.	Field inspection	At the time of field inspections	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.12-2b	The applicant shall install landscaping between the landfill operations and Medicine Rock to create a dust screen. The landscape screen shall include shrubs and trees, such as manzanita and ceanothus.	Field inspection	Prior to operation of landfill	County Department of Environmental Health		
MM 4.12-3	The applicant shall monitor noise levels at the ridgeline during the relocation of the SDG&E transmission towers. If noise levels exceed 62.5 dBA L_{eq} at the ridgeline, the applicant shall implement some or all of the following measures to reduce the noise levels to below 62.5 dBA L_{eq}: • Build temporary noise barriers or berms between construction activities and the ridgeline. Design parameters (e.g., height, length, and location) for these temporary noise barriers or berms shall be determined by a qualified noise expert. • Reduce the amount or size of construction equipment. For example, equipment with smaller engines could be used. If the 62.5 dBA L_{eq} threshold is not exceeded, no action beyond monitoring shall be necessary.	Noise monitoring and written report by applicant's noise expert	During relocation of the transmission towers	County Department of Environmental Health		
MM 4.12-4	The project shall mitigate for the loss of ethnobotanical plants in southern willow scrub, mulefat scrub, cotton-willow riparian forest, and native perennial grassland by the creation of in-kind habitats on the landfill site that include ethnobotanical species listed in Appendix O. This revegetated habitat shall be incorporated into the Habitat Enhancement Plan and/or the dedicated open space areas. Before the mitigation plans for these areas are finalized, the Tribe would have the opportunity to provide input concerning the selection of specific ethnobotanical resources. In addition, the Tribe shall be given the opportunity to provide input regarding the location of the in-kind habitats to ensure that tribal members have adequate access to the areas.	Letter from applicant's biologist	Prior to construction activities	County Department of Environmental Health		
	4.13 AESTHETICS					
MM 4.13-1	As required by Proposition C, an overall conceptual landscape treatment plan shall be prepared by a licensed landscape architect and a qualified biologist incorporating the detailed measures for each project element as	Landscape plan	Prior to operation of landfill	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	indicated in MM 4.13-2 through MM 4.13-10. The conceptual landscape plan is shown in Exhibit 4.13-18. The plan shall address the timing of the installation of each element. The elements shall be implemented so as to provide the necessary screening but also to allow efficient operation of the project. The landscape treatment plan shall be approved by the Department of Environmental Health prior to the operation of the landfill.					
MM 4.13-2a	Existing trees and shrubs along SR 76 shall be saved and supplemented by like species and other fast growing trees to create a naturally landscaped transportation corridor through the property, where appropriate to screen the landfill. All on-site highway frontage along the south side of SR 76, shall be planted with a minimum 20-foot wide screen of native or indigenous trees and shrub species The applicant's landscape architect shall verify to the County Department of Environmental Health in writing within two years of commencement of the landfill operation that this measure has been implemented.	Letter from applicant's landscape architect	Two years after commencement of operation of landfill	County Department of Environmental Health		
MM 4.13-2b	Major tree groupings and transplants as well as native revegetation and rock outcrop placement shall be completed along the edges of the landfill. The placement shall not be too far out from the sides of the landfill, taking into consideration the drainage and settlement of the landfill. A transitional blending of the flat landfill face shall be undertaken along the bottom and perimeter edges where it meets the existing terrain. Large boulders and trees could be placed to resemble the ribbon of oak woodland impacted by the landfill. Tree groupings could be placed in groves below existing swales that contain oaks and sycamores. This extension of natural vegetation communities would help break the geometric lines of the landfill and would help the face blend with the surrounding hillsides. The applicant's landscape architect shall verify to the County Department of Environmental Health in writing after implemented as determined in the landscape plan.	Letter from applicant's landscape architect	After installation as determined in landscape plan	County Department of Environmental Health		
MM 4.13-2c	Permanent slopes shall be stabilized with appropriate native plant seed mix and container stock around the edges. In some cases, where phasing	Field verification	At time of field inspections	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	may result in changes and/or transitions to the slopes, more temporary erosion control techniques could be utilized. The County Department of Environmental Health shall field verify implementation of this measure.	verification	inspections	Environmental Health		
MM 4.13-2d	Any landfill slope that would remain unchanged beyond one full year shall be hydroseeded or revegetated. Revegetation shall take into account the contrast, color, and texture so that it can blend back into the local setting. The County Department of Environmental Health shall field verify implementation of this measure.	Field verification	At time of field inspections	County Department of Environmental Health		
MM 4.13-2e	Drainage and methane extraction structures and pipes shall be painted or be made of materials that fit into the local color environment and that match adjacent textures. Painting of the structures, pipelines and other facilities associated with surface drainage, subsurface drainage and methane gas control would help blend them into the background of the areas that they are traversing. At the time of installation of the drainage and methane extraction structures and pipes, the operator shall provide a letter to the San Diego Air Pollution Control District and the County Department of Environmental Health indicating that the measure has been implemented.	Letter from landfill operator	At time of installation of drainage and methane extraction structures and pipes	San Diego Air Pollution Control District and County Department of Environmental Health		
MM 4.13-2f	Brow ditches shall be constructed with outside bench lips slightly higher than inside edges. Culverts and other pipelines connecting brow ditches shall be painted to blend with landfill slopes. Integral or stained color shall be used on all brow ditches. A natural brown, beige or sand colored staining shall be used so that the ditch will not contrast with adjacent colors. Painting of miscellaneous structures shall use a variety of colors that match the revegetation patch and soil color that the pipeline is going through. At the time of installation of the brow ditches, culverts and pipelines, the operator shall provide a letter to the County Department of Environmental Health indicating that the measure has been implemented.	Letter from landfill operator	At time of installation of brow ditches, culverts and pipelines	County Department of Environmental Health		
MM 4.13-2g	The applicant shall explore the feasibility of obtaining a landscape easement along SR 76 to the west of the site on the adjacent property or the Caltrans right-of-way as shown on Exhibit 4.13-17 of the Final EIR.	Written correspondence from applicant	Prior to commencement of operation	County Department of Planning and Land Use		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	The easement, if obtained, shall be planted with a screen of native or indigenous trees and shrub species to create a naturally landscaped transportation corridor similar to the screening on the project site. The landscaping shall provide screening of the landfill for drivers traveling west along SR 76 towards the site.	demonstrating good faith effort				
MM 4.13-3	The benches and lifts shall be graded to minimize the significant landform quality impact. Blending of created landforms with adjacent landforms can be achieved by manipulating the landform to resemble or meld with its surroundings, planting to create the pattern resembling the adjacent vegetation matrix and its colors, and incorporating boulders into the final grades to create the rocky texture of the surrounding hillsides. The County Department of Environmental Health shall field verify implementation of this measure.	Field verification	At time of field inspections	County Department of Environmental Health		
MM 4.13-4	Areas within public view, such as along SR 76, adjacent to the facility area or within the abandoned Lucio Dairy parcels, shall be revegetated to mitigate for the loss of visual resources in accordance with the landscape plan (MM 4.13.1). The revegetation shall contain both oak woodland habitats and riparian plantings. Wherever possible, boulders and rock outcrops should be relocated from disturbed areas to replanted areas. The plan shall incorporate and compliment the mitigation for biological resources (Section 4.9). The revegetation shall be implemented within two years after the commencement of the landfill operation.	Landscape plan	Two years after commencement of operation of the landfill	County Department of Environmental Health		
MM 4.13-5	Large riparian trees along with the associated understory found within these riparian zones shall be planted along the access road and bridge to screen the project elements and the excavation in accordance with the landscape plan (MM 4.13.1). The plan shall incorporate and compliment the mitigation for biological resources (Section 4.9). Landscaping shall be installed immediately after completion of the access road and bridge and implementation of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Letter from applicant's landscape architect	Immediately after completion of the access road and bridge	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
MM 4.13-6a	In consultation with the landfill engineer, rock outcrops removed from the landfill footprint shall be placed in strategic locations around the facilities area. Implementation of this measure shall occur after completion of the facilities area or in accordance with the landscape plan (MM 4.13.1). Completion of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Letter from applicant's landscape architect	After completion of facilities area or in accordance with the landscape plan (MM 4.13-1)	County Department of Environmental Health		
MM 4.13-6b	Areas adjacent to the ancillary facilities area and next to the water tank shall be planted with mature trees in major tree groupings to screen visual access to those structures. In addition, disturbed slopes shall be revegetated with native species. These concepts and the timing of implementation shall be incorporated into the landscape plan (MM 4.13.1). Completion of this measure shall be verified in writing to the County Department of Environmental Health by the applicant's landscape architect.	Letter from applicant's landscape architect	After completion of facilities area or in accordance with the landscape plan (MM 4.13-1)	County Department of Environmental Health		
MM 4.13-6c	The facilities and miscellaneous structures shall be painted or be made of materials that fit into the local color environment and shall also match adjacent textures. Implementation shall be field verified by the County Department of Planning and Land Use—Building Division after construction of the facilities area.	Building permit/ Plan review	After construction of facilities area	County Department of Planning and Land Use—Building Division		
MM 4.13-7	Landscape plans shall include vegetative screening on the side slopes and in areas below the crest to hide the grading for the western desilting basin. Landscaping shall be installed after completion of the western desilting basin. The applicant's landscape architect shall verify in writing to the County Department of Environmental Health that this measure has been implemented.	Letter from applicant's landscape architect	After installation of western desilting basin	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
MM 4.13-8a	Landform screening shall be implemented, including major tree groupings, at the edges of the Borrow/Stockpile Area A to help block the views of the area. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Letter from applicant's landscape architect	After closure of Borrow/Stockpile Area A	County Department of Environmental Health		
MM 4.13-8b	The project grading plan shall include contouring of landforms to help blend the general forms of land masses on part of the lower stockpile areas. Gentle grading and curvilinear shapes shall be used to help blend top and side slopes in with the natural topography. Large, undifferentiated, flat slopes shall be avoided. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Field verification	At the time of field inspections after commencement of operation	County Department of Environmental Health		
MM 4.13-8c	After initial construction, Borrow/Stockpile Area A shall be revegetated. Contrast, texture, and color matching shall be achieved in all revegetation. All areas shall be replanted with native plant materials that will decrease the amount of value and color contrast with surrounding areas. The Department of Environmental Health shall field verify the implementation of this measure after commencement of operation.	Field verification	At the time of field inspections after closure of Borrow/Stockpile Area A	County Department of Environmental Health		
MM 4.13-9a	The project grading plan shall include contouring of landforms to help blend the general forms of land mass on part of the upper stockpile areas. Gentle grading and curvilinear shapes shall be used to help blend top and side slopes in with the natural topography. Large, undifferentiated, flat slopes or pads shall be avoided. Leading edge landforms shall be created within the first two years of the creation of Borrow/Stockpile Area B to help block the views of the working face of the stockpile. The Department of Environmental Health shall field verify the implementation of this measure after commencement of use of Borrow/Stockpile Area B.	Field verification	At the time of field inspections after commencement of use of Borrow/Stockpile Area B	County Department of Environmental Health		
MM 4.13-9b	If a stockpile landform were to remain beyond one full year, the area shall be hydroseeded or other revegetation efforts undertaken. Contrast, texture, and color matching shall be achieved in all revegetation. All areas shall be replanted with native plant materials that will decrease the	Field verification	Annually upon commencement of use of borrow/stockpile	County Department of Environmental Health		

TABLE 10-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR PROJECT IMPACTS (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	amount of value and color contrast with surrounding areas. Temporary revegetation of slopes shall also be used to reduce contrast, insofar as the proper colors and textures are utilized in the plant selection process. The Department of Environmental Health shall annually field verify the implementation of this measure after commencement of use of Borrow/Stockpile Area B.		areas			
MM 4.13-9c	Landform screening shall be planted, including major tree groupings, at the edges of the Borrow/Stockpile Area B to screen the area from view. After installation as determined in the landscape plan (MM 4.13.1), the applicant's landscape architect shall verify implementation of this measure in writing to the Department of Environmental Health.	Letter from applicant's landscape architect	After installation as determined in landscape plan	County Department of Environmental Health		
MM 4.13-10	In consultation with SDG&E, the applicant shall minimize the pad areas needed for the relocated powerline towers. Related cut slopes shall be permanently revegetated and landform grading techniques shall be used to blend the pads in with adjacent landforms. The cut face of these pads shall be sculpted to allow rock outcrops to remain and be prominent. Additional rock outcrops shall be placed where they do not interfere with the access and maintenance requirements of the towers. The applicant's landscape architect shall provide a letter to the County Department of Environmental Health verifying that these measures shall be implemented prior to the relocation of the towers.	Letter from applicant's landscape architect	Prior to relocation of transmission towers	SDG&E and County Department of Environmental Health		
MM 4.13-11	If the landfill face is disturbed to repair any surface cracking, settlement, and/or surficial slumping, the area shall be recontoured to match the approved contours and the area shall be revegetated immediately, using the approved plant palette in the Final Closure Plan (see Table 3-5 of the EIR for a plant species list), after the completion of the repair work.	Letter from applicant's engineer and landscape architect	After the completion of the repair work	County Department of Environmental Health		

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	LAND USE					
MM4.1.C5A	*The solid waste facilities shall remain open for the receipt of refuse a minimum of eight (8) hours a day, six (6) days a week, excepting those holidays observed by County-owned landfills.*[4]	Field Verification	At the time of field inspections	County Department of Environmental Health		
MM 4.1.C5B	*Solid waste operation shall occur only between the hours of 7:00 AM and 6:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM on Saturday unless different hours are established by the Integrated Waste Management Board.*[5] *For the purposes of this mitigation measure "solid waste operations" shall include the receipt, handling, processing, and/or disposal of solid waste or recyclable materials; cover operations; site grading and/or excavation, including blasting and rock crushing; and heavy equipment operation. Other site activities such as the operation of gas and leachate collection and treatment systems, remedial activities required by a regulatory agency, maintenance within the maintenance yard, and activities conducted in a completely enclosed building shall not be limited to these hours of operation.*	Field Verification	At the time of field inspections	County Department of Environmental Health		
MM 4.1.C5Q	*A Citizen Environmental Review Board (the "Board") shall be established by agreement between the Applicant and the cities or other governmental entities agreeing to supply waste to the Project. The members of such Board shall be appointed by each such city or entity and shall be individual citizens who are not employees or officials of such city or entity. The Board shall have the authority to inspect and review all reports submitted by the Project to any other regulatory agency and to make recommendations to any such regulatory agency with respect to the operation of the Project, including any enforcement actions the Board may deem appropriate. The Board shall establish an*	Letter from applicant	After commencement of operation when at least five (5) public agencies execute waste supply agreements with the operator	County Department of Environmental Health		

[4] Effective October 31, 1998, there are no County-owned landfills. Since this measure was contained in Proposition C, it is provided verbatim.

[5] Although stated this way in Proposition C, the Local Enforcement Agency, which is County DEH, will be the agency regulating and enforcing hours of operation.

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	environmental review team consisting of qualified personnel to monitor the operations of the landfill which team shall have reasonable access to the landfill during all hours of operation of the landfill.					
	Geology and Soils					
MM 4.2.C5H	*All structures located at the Gregory Canyon site shall be designed by a qualified engineer to withstand the maximum probable earthquake, to avoid potential impacts associated with earthquakes and ground shaking.*	Plan review	Prior to issuance of building permit	Department of Planning and Land Use—Building Division		
	Hydrogeology & Surface Hydrology					
MM 4.3.C5E	*A liner and leachate collection system shall be installed and monitored as required by the Regional Water Quality Control Board.*	Joint technical document; field verification and reporting by applicant's hydrogeologist	Phased installation of liner—verification as needed	Regional Water Quality Control Board		
MM 4.3.C5G	*The project shall comply with all requirements of the Regional Water Quality Control Board to ensure protection of surface and underground water quality.*	Joint technical document; field verification and reporting by consultant	Phased implementation of regulations—as needed	Regional Water Quality Control Board		
	Traffic and Circulation					
M 4.5.C5I	*In order to mitigate traffic impacts, the Applicant shall widen and realign State Route 76 on either side of the access road to improve sight distance and to facilitate truck movements. The realigned segment will provide approximately 1,000 feet of sight distance in both directions for traffic leaving the landfill. The Applicant shall contribute on a fair share basis to the widening of State Route 76 west of the access road to applicable state standards. The fair share shall be based upon the state standard average daily trips. Striping will be provided for acceleration/ deceleration lanes and an over-take lane for through traffic. These*	Field verification of SR 76 improvements identified in the project description	Prior to acceptance of solid waste	Caltrans and County Department of Public Works		

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	realignment plans may be modified as necessary to meet Caltrans requirements.					
	Noise and Vibration					
MM 4.6.C5K	*The applicant shall prepare a Noise Abatement Plan to include:* • *Physical design provisions to ensure that ambient noise levels do not exceed 65 CNEL at the boundaries of the Gregory Canyon site.* • *Installation of landfill equipment and vehicles with noise suppressing equipment to assist in meeting the above restrictions.*	Joint technical document; written plan by applicant; written report by applicant's noise expert after testing; letters prior to blasting	Annual report	County Department of Environmental Health		
	• *Provisions for at least 24-hour in advance written notice of any blasting on-site to residents within a one-mile radius of the blast site.* *Where ambient noise levels exceed 65 CNEL at the boundaries of the Gregory Canyon site, the applicant shall retain a qualified noise expert to evaluate the problem and recommend mitigation measures. These mitigation measures will be implemented by the applicant.*		Letters prior to blasting	Sheriff's Department and County Depart-ment of Environmental Health (Blasting)		
	Air Quality					
MM 4.7.C5F	*The Project shall include a network of vertical extraction wells, lateral transmission pipes to a gas recovery facility, and perimeter gas monitoring probes. With this system, the landfill gas will be extracted from the landfill and combusted in an enclosed flare.*	Plan review	Prior to issuance of a permit for gas recovery system	San Diego Air Pollution Control District		
MM 4.7.C5J	*Air quality impacts associated with the Project shall be mitigated by meeting all requirements imposed by the San Diego Air Pollution Control District for the Authority to Construct and Authority to Operate permits.*	Plan review	Prior to issuance of Authority to Construct and Authority to Operate permits	San Diego Air Pollution Control District		

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
MM 4.7.C5L	*To control odors on-site, the Applicant shall submit an Odor Control Plan to the San Diego County Air Pollution Control District for review and approval.*	Written plan	Prior to acceptance of solid waste	San Diego Air Pollution Control District		
MM 4.7.C5M	*To control dust from Project operations, the Applicant shall submit a Dust Control Plan to the San Diego County Air Pollution Control District for review and approval.*	Written plan	Prior to acceptance of solid waste	San Diego Air Pollution Control District		
	Biological Resources					
MM 4.9.C5N	*All sensitive species and habitat impacted by the Project shall be mitigated in accordance with requirements imposed by the United States Fish & Wildlife Service as part of the Section 7 consultation.*	Biological opinion	Prior to issuance of grading permit	U.S. Department of Interior (U.S. Fish and Wildlife)		
MM 4.9.C5C	*At least five (5) days each week, the Applicant shall inspect for, and clean up, all litter and illegal dumping which occurs on, or adjacent to, the landfill access road and that portion of SR 76 between the intersection with Interstate 15 and the site. The clean up team shall consist of at least one truck with a minimum crew of two persons.*	Field verification	At the time of field inspections	County Department of Environmental Health and Department of Planning and Land Use—Codes Division		
	Ethnohistory and Native American Interests & Archaeological and Cultural Resources					
MM 4.11.C5P & MM4.12.C5P	*Impacts to Native American resources impacted by the Project shall be mitigated through the development of a Memorandum of Agreement between the Applicant and the appropriate regulatory agencies in accordance with Section 106 of the National Historic Preservation Act.*[6]	Memorandum of Agreement only if Section 106 applies	Prior to issuance of grading permit	State Historic Preservation Office		

[6] Section 106 consultation under the NHPA, if and to the extent required, will occur with issuance of the nationwide permit.

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
	To mitigate archaeological impacts caused by the Project, the Applicant shall retain a qualified archaeologist to investigate and recommend appropriate mitigation measures. These mitigation measures shall be implemented by the Applicant.	Letter from applicant's cultural expert	Prior to certification of the Final EIR or prior to or during construction as stated in mitigation measures 4.11-1 through 4.11-7	County Department of Environmental Health		
	Aesthetics					
MM 4.13.C5O	*In order to mitigate visual impacts associated with the Project, the Applicant shall employ extensive use of landscaping emphasizing native vegetation, and rounding/undulation of slopes on the refuse column and changes in slope angles. All landscaping shall be performed by a licensed landscape architect in the State of California. This licensed architect shall prepare a detailed landscape plan designed to minimize visual impacts associated with the Project to the maximum feasible extent. The plan prepared [by] the licensed architect shall be implemented by the Applicant upon completion.*	Landscape plan prepared by applicant's landscape architect	Prior to commencement of operation	County Department of Environmental Health		
	Human Health and Safety					
MM 4.16.C5C	*At least five (5) days each week, the Applicant shall inspect for, and clean up, all litter and illegal dumping which occurs on, or adjacent to, the landfill access road and that portion of Highway 76 between the intersection with Interstate 15 and the site. The clean up team shall consist of at least one truck with a minimum crew of two persons.*	Field inspection	At the time of field inspections	County Department of Environmental Health		
MM4.16.C5D	*The Applicant shall maintain trained, full-time personnel engaged exclusively and continuously in the inspection of incoming refuse loads for hazardous waste. These personnel shall be stationed at the working face of the landfill whenever the landfill is open to accept waste and shall inspect loads as they are tipped. Hazardous wastes encountered in this fashion shall be handled and disposed of in accordance with state regulations.*	Field inspection	At the time of field inspections	County Department of Environmental Health		

TABLE 10-2
PROPOSITION C MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

PROPOSITION C MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
MM 4.16.C5F	*The Project shall include a network of vertical extraction wells, lateral transmission pipes to a gas recovery facility, and perimeter gas monitoring probes. With this system, the landfill gas will be extracted from the landfill and combusted in an enclosed flare.*	Plan review	Installation of extraction wells, transmission pipes and perimeter gas monitoring probes when determined appropriate	San Diego County Air Pollution Control District		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	4.4 SURFACE HYDROLOGY					
MM 4.4-1	If relocation of the First San Diego Aqueduct pipelines is implemented, the applicant shall design and engineer the relocation so that no flood related impacts to the pipelines would occur, in accordance with SDCWA approval. Alternately, the relocation shall be adjusted to avoid placement of the pipelines within the 100-year floodplain.	Agreement with SDCWA	Prior to First San Diego Aqueduct Relocation Option construction	SDCWA		
	4.7 AIR QUALITY & AIR TOXICS HEALTH RISKS					
MM 4.7-3	The construction contractor responsible for the relocation of the First San Diego Aqueduct shall implement the following measures: • Use water trucks to keep all areas of vehicle movement sufficiently damp to prevent the raising of dust by travel; • Wet down the site in the late morning and after work is complete for the day; • At least once per day wet down non-active construction areas that have not be reseeded to minimize windblown dust; • As soon as feasible, re-establish groundcover on areas disturbed by construction through seeding and watering those areas that will not be disturbed for extended periods (e.g., two months or more); • Reduce traffic speeds on all unpaved road surfaces to no more than 15 miles per hour; and • Maintain construction equipment engines by keeping them tuned in accordance with manufacturers specifications.	Field verification	Field inspection during First San Diego Aqueduct Relocation Option construction	San Diego Air Pollution Control District		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	4.9 BIOLOGICAL RESOURCES					
MM 4.9a	A pre-construction meeting shall take place with a qualified biologist and construction personnel. The biologist shall explain the access restrictions on site, the importance of remaining within construction zones, the sensitivity of the habitats and species on site, and shall explain the potential consequences of violating the access restrictions and impacting biological resources outside the construction zones. Any accidental impacts to sensitive habitat occur outside the designated impact area shall be mitigated at a 3:1 ratio. A letter from the applicant's biologist and contractor(s) verifying receipt of biological information shall be provided to the County Department of Environmental Health prior to commencement of construction.	Letter from applicant's contractor(s) verifying receipt of biological information	Prior to commencement of construction	County Department of Environmental Health		
MM 4.9-19a	The construction easement (minus permanent access road) shall be revegetated with coastal sage scrub immediately following completion of the pipeline relocation on the landfill site. The landscape plans shall incorporate this revegetation requirement.	Preparation of landscape plans	Prior to commencement of construction	County Department of Environmental Health and Department of Planning and Land Use		
MM 4.9-19b	Coastal sage scrub shall be mitigated at a 2:1 ratio by the preservation of 19.0 acres of coastal sage scrub in dedicated open space on the landfill site.	Verification of recordation of open space easement on site encompassing the coastal sage scrub and coastal sage scrub/chaparral mitigation areas	Prior to commencement of brushing or clearing of coastal sage scrub and coastal sage scrub/ chaparral or at a point in time determined appropriate through consultation with the applicable regulatory agencies	County Department of Environmental Health and Department of Planning and Land Use		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	VERIFICATION OF COMPLETION DATE
MM 4.9-19c	Coast live oak woodland shall be mitigated at a 2:1 ratio by the off-site acquisition of 1.6 acres of existing coast live oak woodland of like quality. The off-site acquisition shall occur in an unincorporated area of San Diego County. A conservation easement shall be placed across the off-site mitigation area to permanently protect the resource. If possible, individual oak trees shall be salvaged from the impact area and transplanted to appropriate open space habitat on the landfill site. The implementation of this mitigation shall be prior to or concurrent with construction or as otherwise determined in consultation with the County.	Copy of recorded open space easement on site and for a parcel(s) off site encompassing the oak woodland mitigation area(s). If on site habitat creation is implemented, preparation of mitigation plan by applicant's biologist. Letters of approval of plan by resource agencies. Field verification of plan implementation by applicant's biologist	Prior to commencement of clearing or grading of the coast live oak woodland or as otherwise determined in consultation with the County	California Department of Fish and Game, County Department of Environmental Health and Department of Planning and Land Use		
MM 4.9-19d	Temporary construction fencing shall be erected under the supervision of a qualified biologist outside the delineated boundary of dedicated open space (Figure 3b) where it interfaces with impact areas. Where impact areas are adjacent to coast live oak woodland, fencing shall be erected outside the canopy area at a distance of 1.5 times the canopy radius of the outer trees. This fencing shall be erected prior to commencement of brushing or grading activities. The fencing (for example, strand wire or split rail) shall restrict human and equipment access but shall allow for wildlife movement.	Letter from applicant's biologist/field verification	Prior to commencement of brush clearing or grading	County Department of Environmental Health		
MM 4.9-19e	Impacts to potential arroyo southwestern toad upland habitat from the relocation of the pipelines shall be mitigated through the Wetland Mitigation and Habitat Enhancement Plan to be implemented as part of the landfill project.	Preparation and acceptance of habitat enhancement plan	Prior to construction	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environ-		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
				mental Health and County Department of Planning and Land Use		
MM 4.9-19f	Temporary erosion control measures such as silt fencing, sand bags, and straw matting shall be used to reduce potential siltation of drainage courses including the San Luis Rey River.	Preparation of erosion control plan	Prior to commencement of construction	County Department of Environmental Health and Department of Planning and Land Use		
MM 4.9-19g	The pipeline easement shall be fenced within two kilometers of the San Luis Rey River with exclusion fencing to prevent arroyo southwestern toad access to the construction zone. The fencing shall be a silt-screen type barrier comprised of a minimum 24-inch high fence with the remainder (minimum 12 inches) anchored firmly against the ground. The fence may be buried if necessary to exclude toad access. The fence locations shall be identified by a qualified biologist and adjusted as necessary. Exclusion fencing shall be monitored by a qualified biologist and maintained in its original condition by construction personnel for the entire length of the construction period.	Letter from applicant's biologist based on field verification	Prior to commencement of construction of bridge	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-19h	Pre- and post- exclusion fencing surveys within the construction zone shall be conducted for arroyo southwestern toads by a biologist permitted by the USFWS to handle the toad. Prior to construction commencement, a minimum of three surveys shall be conducted by this biologist following installation of the fencing. Any toads found shall be relocated to appropriate similar habitat outside project impact areas and in dedicated open space on the landfill site.	Written report from biologist permitted by U.S. Fish and Wildlife Service to handle toad	Prior to construction, minimum of 3 surveys following installation of the fencing, then daily surveys before construction begins	U.S. Fish and Wildlife Service, California Department of Fish and Game, County Department of Environmental Health and County		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
				Department of Planning and Land Use		
MM 4.9-19i	The trench dug for relocation of the pipelines shall be securely covered at the end of construction each day such that wildlife does not become trapped in the trench.	Field verification by applicant's biologist	Daily during construction within 2 km of river	County Department of Environmental Health and County Department of Planning and Land Use		
MM 4.9-19j	Construction noise shall not result in exceedances of 60 dB(A) L_{eq} on least Bell's vireo and southwestern willow flycatcher habitat between March 15 and September 15 unless noise attenuation measures designed by an acoustician are implemented to reduce noise levels in vireo/flycatcher habitat to below 60 dB(A) L_{eq}.	Construction contract addressing timing or noise analysis prepared by applicant's noise specialist	Daily between March 15th and September 15th during initial construction. If noise barriers are required, weekly monitoring to ensure their effectiveness	County Department of Environmental Health and County Department of Planning and Land Use		
	4.13 AESTHETICS					
MM 4.13-12a	Disturbed areas shall be graded to blend the area with the existing landform. Gentle grading and curvilinear shapes shall be used to help blend slopes in with the natural topography. Large, undifferentiated, flat slopes or pads shall be avoided. The applicant's landscape architect shall provide plans to SDCWA for review and approval. County Department of Environmental Health shall field verify implementation of this measure.	Letter from Applicant's landscape architect; field verification	During First San Diego Aqueduct Relocation Option construction	County Department of Environmental Health; SDCWA		
MM 4.13-12b	After construction, disturbed areas within and around the SDCWA aqueduct easement shall be revegetated with native species in accordance with an approved landscape treatment plan. County Department of Environmental Health shall field	Letter from Applicant's landscape architect; field verification	After First San Diego Aqueduct Relocation Option construction	County Department of Environmental Health; SDCWA		

TABLE 10-3
FIRST SAN DIEGO AQUEDUCT RELOCATION OPTION
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

MITIGATION MEASURE NO.	MITIGATION MEASURE	METHOD OF VERIFICATION	TIMING OF VERIFICATION	RESPONSIBLE PARTY	VERIFICATION OF COMPLETION INITIALS	DATE
	verify implementation of this measure.					
MM 4.13-12c	Aqueduct portals and air vents shall be designed to blend in with the landscape through the use of a variety of colors that match the revegetation patch and soil color that the facility is going through. County Department of Environmental Health shall field verify implementation of this measure.	Letter from Applicant's landscape architect; field verification	After First San Diego Aqueduct Relocation Option construction	County Department of Environmental Health; SDCWA		

10.3 POTENTIAL SECONDARY IMPACTS ASSOCIATED WITH IMPLEMENTATION OF THE MITIGATION MEASURES

Section 15125.6(D) of the CEQA Guidelines requires that, "If a mitigation measure would cause one or more significant effects in addition to those that would caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed."

Implementation of the mitigation measures summarized in the MMRP could result in potential secondary impacts that would, if found to be significant, need to be mitigated with the applicable mitigation measures presented in Chapter 4.0, Environmental Analysis. Table 10-4 identifies those mitigation measures that could result in potential secondary impacts and identifies the nature of the potential secondary impact.

TABLE 10-4
POTENTIAL SECONDARY IMPACTS FROM IMPLEMENTATION OF MITIGATION MEASURES

MITIGATION MEASURE NO.	GENERAL DESCRIPTION OF MITIGATION MEASURES	POTENTIAL IMPACT OF MITIGATION MEASURES
4.9-1f, 4.9-12a, 4.9-13, 4.6-1a	Temporary and permanent barriers to protect sensitive receptors.	Potential adverse impacts to important cultural sites.
4.9-1a, 4.9-1b, 4.9-1c, 4.9-1d, 4.9-1e, 4.9-18	Re-creation of sensitive habitat lost.	Potential adverse impacts to important cultural sites.
4.13-2a, 4.13-2b, 4.13-5, 4.13-6b	Placement of landscaping to reduce effects on landform alterations and aesthetics.	Potential adverse impacts to sensitive habitats and wildlife and cultural sites.
4.12-1c	Construction of footpath trail on the east side of Gregory Mountain to enhance access to the traditional cultural site on the mountain.	Additional short-term construction impacts; potential long-term adverse impacts to sensitive habitats and wildlife, important cultural sites.

No significant impacts would result from implementation of the mitigation measures provided in Table 10-4 above. The construction of any barriers that may be necessary would be short-term and would not result in significant noise impacts.[7] In addition, significant impacts to biological and cultural resources would not occur as any potential barriers would be constructed in already disturbed areas. Implementation of these measures would also not affect views of visual resources and therefore, would not result in significant aesthetics impacts. The mitigation measures that include landscaping and restoration/replacement of sensitive habitat loss would be consistent with the proposed conceptual landscape plan, which has been prepared in consultation with the project biologist. Implementation of these measures in accordance with the conceptual landscape plan would ensure that no significant impacts to biological resources would occur. (Please refer to Appendix L of this Final EIR for the Wetland Mitigation and Habitat Enhancement Plan. Also refer to Exhibit 4.13-18 in this Final EIR.) The measures for landscaping and restoration/replacement of sensitive habitat loss would not be anticipated to

[7] While sound walls are considered along SR 76 to mitigate the increase in noise levels from project-generated and cumulative traffic, it has been determined that these walls are not feasible. Therefore, no secondary impacts would occur.

affect archaeological resources. However, in the event that archaeological resources are uncovered as the measures are implemented, such resources would be treated in accordance with State law to ensure that no impacts to these resources would occur.

With regard to MM 4.12-1c, the construction of a foot trail on the east side of Gregory Mountain, it is expected that this measure would be designed and routed with consultation with members of the Luiseño Tribe. If the Tribe accepts this measure, any necessary subsequent environmental reviews would be conducted by the appropriate Lead Agency. Subsequent environmental review would be conducted by the Lead Agency.

In conclusion, each of the mitigation measures has been considered to determine if secondary impacts would result from the implementation of the measures. No secondary impacts have been identified and, therefore, no mitigation would be required as a result of these measures.

10.4 ADDITIONAL ENVIRONMENTAL ANALYSIS—SR 76 IMPROVEMENTS

In Section 4.5, Traffic and Circulation, there is a discussion concerning accident rates on SR 76 in the project vicinity. Historically, the average accidents on three segments of SR 76 between I-15 east past the project site from 1991 to 1998 were higher than the State average for similar facilities. The I-15 to Pankey Road segment, which is closest to the I-15 ramps and contains fewer curves, had an average of 4.63 accidents per million vehicle miles (MVM) compared to the state average of 1.46 per MVM in the seven year period. The Pankey to west of Couser Canyon segment had an average of 2.07 accidents per MVM compared to the state average of 1.47 in the seven year timeframe. The west of Couser Canyon to east of the Project Access segment had an average of 2.56 accidents per MVM compared to the state average of 1.48 between 1991 and 1998.

The addition of traffic alone does not increase the accident rate because a variety of factors cause auto accidents, such as driver behavior (experience, carelessness), speed, weather conditions, time of day, visibility, and roadway conditions. However, the existence of a substandard radius curve west of Couser Canyon is a known existing roadway condition that could directly contribute to the higher accident rate. The applicant is negotiating an agreement with Caltrans under which a contribution to improve safety conditions on SR 76 in the project vicinity would be made. Options being considered are the implementation of interim improvements to the hairpin turn to the west of Couser Canyon Road at PM 19.393 and improvements to the Rice Canyon/SR 76 intersection; contribution to long term Caltrans improvements; or contribution in an amount equal to the estimate for the interim improvements that could be used directly or in cooperation with other agencies to implement other equivalent safety improvements, such as speed monitoring and enforcement, between I-15 and the project access road.

If the implementation of the interim improvements were selected, environmental clearance for the improvements would be necessary. Therefore, the following is a description of the possible improvements and an analysis of the potential impacts that could occur if Caltrans were to choose to implement the interim measures.

10.4.1 Potential Interim Improvements

The interim improvements to SR 76 would occur at the hairpin curve and the SR 76/Rice Canyon Road intersection. The hairpin curve would be softened and the roadway widened to

approximately 48 feet, with two 16 foot travel lanes (e.g., one lane in each direction) and two 8-foot shoulders. The length of roadway construction would be approximately 1,500 feet.

The interim improvements to the SR 76/Rice Canyon Road intersection would widen the roadway to approximately 40 feet, with two 12-foot travel lanes (e.g., one lane in each direction) and two 8-foot shoulders. The interim improvements to Rice Canyon Road would result in a 24-foot-wide roadway, with two 12-foot travel lanes. The length of roadway construction for the SR 76/Rice Canyon Road intersection would be approximately 820 feet.

The following provides a discussion on the potential impacts that would occur if the interim improvements were to be implemented by Caltrans.

Land Use

Additional right-of-way would be required to implement the improvements. No other land use impacts would occur from the roadway improvements.

Geology and Soils

No impacts to geology and soils would occur from the implementation of the improvements.

Hydrogeology

No hydrogeology impacts would occur from the implementation of the improvements.

Surface Hydrology

No impacts to surface hydrology would occur from the implementation of the improvements.

Traffic and Circulation

No impacts to traffic and circulation would occur from the implementation of the improvements.

Noise and Vibration

No noise and vibration impacts would occur from the implementation of the improvements.

Air Quality

No impacts to air quality would occur from the implementation of the improvements.

Agricultural Resources

No impacts to agricultural resources would occur from the implementation of the improvements.

Biological Resources

This discussion is summarized from the biological resources technical report in Appendix L. The curve improvements would impact 0.03 acre of ACOE wetland (freshwater marsh) from a fill slope and 0.07 acre of CDFG jurisdiction (consisting of 0.04 acre of southern willow scrub and the 0.03 acre of freshwater marsh accounted for under ACOE jurisdiction). The majority of the improvement areas contain non-sensitive habitats and no impacts to an adjacent Caltrans mitigation site would be expected.

The Caltrans Highway 76 improvements would also cause direct and indirect significant impacts to the arroyo southwestern toad (due to loss of potential toad riparian breeding and upland habitat

and potential loss of individual toads during construction) and the least Bell's vireo and southwestern willow flycatcher (due to the potential for construction noise during the breeding season).

Direct impacts to approximately 0.07 acre of potential arroyo toad riparian breeding habitat could occur from Caltrans Highway 76 improvements and would be significant. Direct impacts to 4.73 acres of potential arroyo toad upland habitat (all uplands but developed land considered) could occur from Caltrans Highway 76 improvements and would be significant. The potential loss of individual toads from the highway construction activities would also be significant. In addition, the potential loss of individual toads from roadkill would be significant.

Construction noise would be expected during the installation of the highway improvements for Caltrans. Least Bell's vireo habitat is situated near the base of the slope along the existing curve in Highway 76. Therefore, construction equipment would have the potential to cause short-term noise impacts, if construction activities occur during the vireo breeding season. Although implementation of interim improvements to the hairpin turn would shift the highway south and closer to the habitat, the habitat is already within the area impacted by greater than 60 dB(A) L_{eq}.

Construction of Caltrans Highway 76 curve improvements could also significantly impact the flycatcher by excessive noise. These noise impacts would be the same as those described above for the least Bell's vireo.

Impact 10.4.1*:Significant impacts to sensitive vegetation communities from the Caltrans Highway 76 curve improvements could include 0.03 acre of ACOE wetland (freshwater marsh) from a fill slope and 0.07 acre of CDFG jurisdiction (consisting of 0.04 acre of southern willow scrub and the 0.03 acre of freshwater marsh accounted for under ACOE jurisdiction).*

MM 10.4.1: Impacts to southern willow scrub and freshwater marsh shall be mitigated at a 2:1 ratio. For southern willow scrub, 0.08 acre would be required. For freshwater marsh, 0.06 acre would be required. The southern willow scrub and freshwater marsh habitats shall be created. The southern willow scrub shall be created in an area that would not be affected by noise levels equal to or greater than 60 dB(A) L_{eq}.

Impact 10.4.2*:Direct impacts to approximately 0.07 acre of potential arroyo toad riparian breeding habitat and 4.73 acres of potential arroyo toad upland habitat could occur from Caltrans Highway 76 curve improvements and would be significant.*

MM 10.4.2: A minimum of 4.8 acres of arroyo southwestern toad breeding and upland habitat shall be acquired and preserved in the San Luis Rey River watershed on land that is currently unprotected from development. A conservation easement shall be placed across the mitigation area to permanently protect the resources.

Impact 10.4.3*:The potential loss of individual toads from the Caltrans Highway 76 curve improvements would be significant.*

MM 10.4.3: Twenty-four inch-high exclusion fencing shall be installed under the supervision of a qualified biologist between the interface of project impacts and toad upland and riparian habitats. Surveys prior to

construction each day shall be conducted by a biologist permitted by the USFWS to handle the arroyo southwestern toad following installation of the fencing. Any toads found shall be relocated to appropriate similar habitat outside the construction zone.

Impact 10.4.4*:Construction equipment use in association with Caltrans Highway 76 curve improvements would have the potential to cause short-term noise impacts to the least Bell's vireo and southwestern willow flycatcher, if construction activities occur during their breeding seasons.*

MM 10.4.4: Construction activities shall only occur between September 15 and March 15, unless barriers designed by an acoustician can be installed to reduce noise levels. Daily noise monitoring shall be conducted during this time period to verify that the barriers are effective. If the 60 dB(A) L_{eq} is exceeded with the barriers, the acoustician shall work with the construction contractor to make operational changes that would reduce noise to less than significant levels.

Paleontological Resources

No impacts to paleontological resources would occur from the implementation of the improvements.

Ethnohistory/Cultural Resources

This discussion is summarized from a cultural resources letter report in Appendix N. Literature reviews were obtained from the South Coastal Information Center at San Diego State University and from the San Diego Museum of Man. Literature reviews indicate that as many as 30 prehistoric resources have been recorded within a one mile radius of the SR 76 curve improvement areas. The density of sites establishes that the area is one of very high archaeological sensitivity. The literature reviews establish that three prehistoric archaeological sites have been recorded near the SR 76 curve improvement areas. These sites are CA-SDI-8871, CA-SDI-744, and CA-SDI-786.

CA-SDI-8871 consists of a series of bedrock milling implements. A few loose artifacts (e.g., four sherds, a flake and a mano fragment) were seen in the outcrop area containing the bedrock implements. This prehistoric site is located approximately 60 meters north of proposed curve improvements and therefore outside the area of potential effects (APE). CA-SDI-744 is a small camping area containing midden soils and 10 bedrock mortars. Loose artifacts included a shell bead and numerous sherds. This prehistoric site is located approximately 60 meters south-southwest of the proposed curve improvements and therefore outside the APE. CA-SDI-786 consists of a mano and a possible hammerstone. This prehistoric site is located approximately 150 meters northwest of the proposed curve improvements and therefore outside the APE. The findings of the literature reviews were confirmed by field studies performed by RMW Paleo Associates in November 1999. No significant impacts would occur.

Aesthetics

No impacts to aesthetics would occur from the implementation of the improvements.

Socioeconomics

No impacts to socioeconomics would occur from the implementation of the improvements.

Public Services and Utilities

No impacts to public services and utilities would occur from the implementation of the improvements.

Human Health and Safety

No impacts to human health and safety would occur from the implementation of the improvements.